CURTIS'S

Botanical Magazine;

OR,

FLOWER-GARDEN DISPLAYED:

IN WHICH

The most Ornamental FOREIGN PLANTS, cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented in their natural Colours.

TO WHICH ARE ADDED,

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated LINNÆUS; their Places of Growth, and Times of Flowering;

Together with the most approved Methods of CULTURE.

A WORK

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as wish to become scientifically acquainted with the Plants they cultivate.

BY *JOHN SIMS*, M.D.

FELLOW OF THE ROYAL AND LINNEAN SOCIETIES.

VOL XLVIII.

Being the Sixth of the New Series.

The FLOWERS, which grace their native beds,
Awhile put forth their blushing heads,
But, e'er the close of parting day,
They wither, shrink, and die away:
But THESE, which mimic skill hath made,
Nor scorched by suns, nor killed by shade,
Shall blush with less inconstant hue,
Which ART at pleasure can renew. LLOYD.

London:

Printed by W. & S. COUCHMAN, Throgmorton-Street.

Published by SHERWOOD, NEELY, & JONES, 20, *Paternoster-Row*;

And Sold by the principal Booksellers in Great-Britain and Ireland.

MDCCCXXI.

J. Curtis Del.

Pub. by S. Curtis. Walworth. Nov. 1. 1820.

Waddell Sc.

MAGNOLIA MACROPHYLLA. LARGE-LEAVED MAGNOLIA.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 3-phyllus. *Petala* 9. *Caps.* 2-valves, imbricatæ. *Sem.* baccata, pundula.

Specific Character and Synonyms.

MAGNOLIA *macrophylla ;* ramis medullosis fragilibus, foliis oblonge subcuneato-obovalibus : basi sinuata subauriculatis, subtus glaucis. *Hort. Kew. ed. alt. 3. p.* 331. *Michaux Amer. bor.* 1. *p.* 327. *Michaux Arb. v. 3. t.* 7.

MAGNOLIA *macrophylla ;* ramis medullosis fragilibus, foliis amplissimis oblonge subcuneato-obovalibus basi sinuata subauriculatis subtus glaucis, petalis sex ovatis obtusis. *Pursh Amer. p.* 381.

MAGNOLIA macrophylla. *Nuttall Amer.* 2. *p.* 18.

MAGNOLIA *macrophylla ;* foliis amplissimis obovato-oblongis basi subauriculatis subtus glauco-subtomentosis. *Poir. Encycl. Sup. 3. p.* 572.

The MAGNOLIA *macrophylla* is a small pyramidal growing tree with leaves and flowers larger than those of any other tree in North-America ; the former growing from a foot to two feet and a half in length, and six or eight inches in breadth, smooth, bright green on the upper and glaucous on the under side; the latter larger than the blossoms of Magnolia *grandiflora,* and in our individual though probably much smaller than in its native soil, too large for the size of our plate. It consists of six white petals, the three internal*

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* Authors generally attribute this colour to the external petals, Michaux having used the word *inferiora,* but we suspect that this is a misprint for *interiora.*

ones

ones tinged with purple towards the base. Its locality seems to be very limited, having been found only in Tenassee, west of the Cumberland River, and in a small district of North Carolina, about twelve miles south-east of Lincolnton.

Our drawing was made from a small tree growing in the open ground in the garden of JAMES VERE, Esq. where it blossomed in July last, perhaps for the first time in England.

Published by S. Curtis, Walworth, Surrey.

Printed by C. Stower, 4, Bridge Street, Row, Walworth.

CHLORANTHUS MONOSTACHYS. ONE-SPIKED CHLORANTHUS, OR CHU-LAN.

Class and Order.

MONANDRIA MONOGYNIA.

* Flores apetali.

Generic Character.

Anthera lateri ovarii insidens (indivisa, bilocularis; vel triloba, 4-locularis). *Ovarium* monospermum: ovulo pendulo. *Stigma* capitatum. *Drupa.* BROWN.

Specific Character.

CHLORANTHUS *monostachys;* antheris incurvis trilobis indivisisve, spicis solitariis, floribus alternis. *Br.*

In the natural system JUSSIEU considers CHLORANTHUS as very nearly related to VISCUM, and has placed it in his family of *Loranthææ,* as established in the *Annales du Muséum,* vol. 12. p. 299. But BROWN makes it the type of a new order, to be called *Chlorantheæ,* the definition of which we may expect from him, perhaps in the next volume of the Transactions of the Linnean Society. To this family belong Ascarina of FORSTER, and Hedyosmum of SWARTZ (the Tafalla of RUIZ and PAVON). Its place in the system will be near to *Piperaceæ* and *Urticeæ,* with both of which it agrees in having the radicle of the embryo in a direction opposite to the umbilicus, and a one-seeded ovarium; but differs especially in its pendulous ovulum and in habit.

By the advice of Mr. BROWN we have placed Chloranthus in the first class of the Linnean system, although, he observes, that only one known species (C. *monander Br.*) is really and at the same time constantly monandrous; for in *inconspicuus* and *elatior (Br.)* the three-lobed four-celled anther, hitherto regarded as an antheriferous petal, is according to him composed

posed of three confluent anthers, of which the middle one only is perfect or two-celled, corresponding with the anther of *monander*, the lateral being dimidiate or one-celled: and in *monostachys* both simple and compound anthers are found in the same spike.

Native of China. Our drawing was taken in August last at the garden of the Horticultural society, by whom this hitherto undescribed species was introduced, through their correspondent JOHN REEVES, Esq. F.R.S. and L.S. of Canton.

N.2191.

J. Curtis Del.

Pub. by S. Curtis, Walworth, Nov. 1. 1820.

Waddell Sc.

RULINGIA PANNOSA. CLOTH-LEAVED RULINGIA.

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Class and Order.

PENTANDRIA PENTAGYNIA.

(Inter Maherniam et Commersoniam).

Generic Character.

Petala 5, è cucullata basi ligulata. *Stamina* sterilia 5, indivisa, (*Nectarium* Lin.). *Ovarium* 5-loculare: loculis dispermis. *Capsula:* septis duplicatis demum 5-partibilis. BROWN.

Specific Character.

RULINGIA *pannosa;* capsulis echinatis exsertis, foliis dentato-serratis acutis planis supra scabris subtus tomentosis: inferioribus ovatis subcordatis passimque lobatis; superioribus oblongo-lanceolatis. *Br. prodr. fl. nov-holl. 2. inedit.*

Our friend Mr. BROWN, to whom we are indebted for the above generic and specific characters, places this genus in the natural system, in his order of *Buttneriaceæ,* which he has defined in the appendix to FLINDERS' voyage, vol. 2. p. 540. It is nearly related to *Commersonia,* from which it differs, in the number of sterile filaments, or division of the nectarium, in the cells of the ovarium being two-seeded, and in the capsule. Named in memory of JOHN PHILIP RÜLING, author of an essay on the Natural Orders, in which he has published the ideas of Professor BÜTTNER upon this subject. A green-house shrub, native of Port Jackson, in New Holland, where Mr. BROWN discovered several other species of the same genus. Communicated by Mr. KENT of Clapton, in May last.

Fig.

Fig. 1. represents a separate flower magnified, as are all the other figures. 2. The Calyx. 3. A Petal, with its cucullated base embracing an anther. 4. The Germen and 5 styles which latter approximate so closely as to appear like one style. 5. The nectarium or five barren filaments, undivided, and wanting the filiform bodies, which are interposed between each in Commersonia.

Galega orientalis. Oriental Goats-Rue.

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Class and Order.

Diadelphia Decandria.

Generic Character.

Cal. dentibus subulatis, subæqualibus. *Legumen* striis obliquis, seminibus interjectis.

Specific Character and Synonyms.

Galega *orientalis;* foliis pinnatis: foliolis ovato-lanceolatis acutis, stipulis ovatis, leguminibus pendulis. *Marsch. a Bieb. Flor. Taur. cauc. 2. p. 182. Suppl. p. 485. Cent. Pl. rar. Ross. 2. t. 67.*

Galega *orientalis;* foliolis ovato-acutis nervosis lævibus, stipulis ovatis integerrimis. *Lam. Encycl. 2. p. 596. Persoon Syn. 2. p. 330.*

Galega *orientalis;* foliis pinnatis: foliolis ovatis acuminatis glabris, stipulis ovatis, floribus cernuis. *Willd. Sp. Pl. 3. p. 1241. Hort. Kew ed. alt. 4. p. 355.*

Galega orientalis latifolia altissima, flore cæruleo. *Tournef. Cor. p. 27.*

Galega montana. *Schultes obs. p. 154. Hoffm. Hort. Mosq. n. 1402. Donn Cantab. ed. 9. p. 244. Lodd. Catal. 1820. p. 46.*

Descr. *Stem* herbaceous, flexuose, obscurely fluted, pubescent at the upper and smooth at the lower parts. *Stipules* oval, concave, reflexed, quite entire, except that sometimes they have two little processes at the base. *Leaves* pinnate: leaflets about seven pair, rounded at the base, pointed at the end, lively green, somewhat villous on the under side. *Peduncles* generally two together from the axil of the terminal leaf. *Flowers* pale violet, in a long raceme, pendulous from short horizontal pedicles. *Bractes* linear-lanceolate concave, reflexed.

reflexed. *Calyx* pubescent. *Alæ* shorter than the *vexillum*: *Carina* shorter than the alæ. *Filaments* all united at the base, but one of them farther distinct than the rest. *Pollen* orange-coloured. *Legumen* somewhat curved, linear, pendulous.

The Galega *orientalis* does not occur in the first edition of Aiton's Hortus Kewensis, being introduced in the year 1801, since the publication of that work by the late Right Hon. Sir Joseph Banks, Bart. whose death will be long lamented, as an irreparable loss, particularly to the whole Botanical world. In our nurseries it has often gone by the name of Galega *montana*, under which it still stands in the last editions of Loddidges and Donn's Catalogues.

We have not seen any representation of this plant, the figure quoted from the supplement to the Flora taurico-caucasica in the second volume of the Century of rare Russian plants by M. Marschall, not having as yet come to hand.

It was first described by Lamarck in the Encyclopédie Botanique from a specimen collected by Tournefort, and preserved in Jussieu's Herbarium.

Native of the subalpine woods of Caucasus and of the Levant. Flowers from June to August.

A hardy perennial, not undeserving a place in the flower garden. Our drawing was taken from a plant communicated by Mr. Jenkins from his Botanic garden in the New Road; our description from one with which we were favoured by Messrs. Loddiges and Sons in June 1807, under the specific name of *montana*.

SIDA NAPÆA. SMOOTH VIRGINIAN SIDA.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. simplex, angulatus. *Stylus* multipartitus. *Capsulæ* plures, mono- s. trispermæ.

Specific Character and Synonyms.

SIDA *Napæa;* foliis subquinque-lobis glabris: lobis oblongis acuminatis dentatis, pedunculis multifloris, capsulis muticis acuminatis. *Willd. Sp. Pl. 3. p.* 765. *Hort. Kew. ed. alt. 4. p.* 206. *Pursh Fl. am. Sept. 2. p.* 453.

SIDA *Napæa;* caulibus virgatis ramosis, foliis glabris cordatis palmatis, lobis quinque acutissime productis, petalis concavis cuspidatis. *Cav. Diss. 5. p.* 277. *t.* 132. *f.* 1.

NAPÆA *lævis;* pedunculis nudis lævibus, foliis lobatis glabris. *Syst. Veg. ed.* 14. *p.* 896. *Lam. ill. gen. t.* 579. *f.* 1. *Encycl. 4. p.* 420. *Hort. Kew. ed.* 1^ma. 3. *p* 417.

NAPÆA *hermaphrodita;* pedunculis nudis lævibus, foliis glabris, floribus hermaphroditis. *Sp. Plant.* 965. *Fabr. Helmst.* 281.

SIDA foliis palmatis, laciniis lanceolato-attenuatis. *Hort. Cliff.* 346. *Hort. Ups.* 198.

ALTHÆA virginiana Ricini folio. *Herm. Lugd.* 22. cum icone.

MALVA aceris folio virginiana. *Tourn. Inst.* 95.

SIDA *Napæa* is more generally known in our nurseries by the name of NAPÆA *lævis*, under which it occurs in the first edition of AITON's Hortus Kewensis. It has indeed been the fate of this plant to be transferred backwards and forwards between these two genera. LINNÆUS at first ranked it under SIDA; remarking, however, that it differed so much from the other species, that it might easily constitute a new genus. Accordingly

Accordingly in the Species Plantarum, it occurs under the name of NAPÆA *hermaphrodita*, changed afterwards to NAPÆA *lævis*. *Cavanilles* reunited NAPÆA with the genus SIDA, in which he has been followed by most botanists since, but JUSSIEU has retained the genus NAPÆA distinguishing it from SIDA by the want of obliquity in the petals and of any articulation in the peduncle; the latter character, however, certainly fails, as the peduncles are as evidently jointed just below the calyx, as in most species of SIDA.

A hardy herbaceous perennial, from four to eight feet high, native of Virginia in North America. Cultivated by Mr. PETER COLLINSON before the year 1748. Flowers in August and September. Communicated by our friend AYLMER BURKE LAMBERT, Esq. from his collection at Boyton.

Pub. by ... W. Curtis, Nov. ... 1820.

DIGITALIS TOMENTOSA. WOOLY LEAVED FOX-GLOVE.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-partitus. *Cor.* campanulata, 4–5-loba, ventricosa. *Caps.* ovata, bilocularis.

Specific Character.

DIGITALIS *tomentosa;* foliis tomentosis rugosis serratis in petiolum decurrentibus utrinque concoloribus, floribus quaquaversum spectantibus.

DESCR. *Stem* about 2 feet high, somewhat branched, villous. *Leaves* alternate, oblong-oval, petiolated, decurrent down the petiole and a little on the stem, tomentose and rugose on the under side. Terminal *raceme* many flowered, side-ones few-flowered: *Flowers* bright blush-coloured, large, spread in every direction. *Bractes* lanceolate, quite entire, longer than the peduncle. *Peduncle* rising, not horizontal, *calyx* villous: *segments* oval, the uppermost one smaller by nearly half than the rest. *Tube* of *Corolla* within the calyx white, above the calyx dilated into an oblong *faux*, convex underneath, flattened above: *mouth* gaping, a little hairy: *upper-lip* short, rounded, slightly emarginate: *lower-lip* 3-lobed: middle lobe long, round oval, spotted and hairy within, side lobes very short. *Stamens* within the faux: *anthers* didymous: lobes finally so divaricate as to stand at right angles with the filament. *Style* equal to the stamens: *stigma* 2-lipped. *Germen* conical, 2-celled: ovules affixed to a central receptacle.

We have not found any thing said about this species, but are informed that it was received from Vienna under the name that we have adopted, by Mr. ANDERSON, of the Chelsea garden, where it flowered, and our drawing was taken in June, 1819. But we find by a specimen from Philip MILLER, now in the Banksian Herbarium, that it was cultivated by him, and supposed to be *Digitalis Thapsi*. From which, however, it seems to differ in many material points, as in the leaves being of the same colour on both sides, supported on long footstalks, not sessile; in the greater length of the bractes; in the flowers not being secund or looking one way, and of a brighter colour. These plants are, however, too nearly allied, and perhaps may only be varieties of the same species.

A hardy biennial, propagated by seeds. Its native country unknown.

GEODORUM CITRINUM. LEMON-COLOURED GEODORUM.

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Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Labellum cucullatum, ventricosum (nunc basi calcaratum), sessile, cum columna non articulatum. *Petala* conformia, subsecunda. *Massæ pollinis* 2, postice lobulo auctæ.

Specific Character and Synonyms.

GEODORUM *citrinum;* scapo foliis breviore, spica pendula: floribus congestis, labello basi subcalcarato; apice obtuso integerrimo. *Brown in Hort. Kew. ed. alt.* 5. *p.* 207. *Poir. Encycl. Suppl.* 5. *p.* 689.
GEODORUM citrinum. *Bot. Repos.* 626.

DESCR. *Leaves* all radical, lanceolate, many-nerved, upon long sheathing footstalks. *Scape* lateral, shorter than the leaves, with alternate sheathing leaves or bractes, the upper ones more expanded from the stalk than the lower, terminating in a cernuous spike of flowers of a pale greenish yellow colour, the *labellum* of which is beautifully variegated with crimson veins. The *Column* erect, semicylindrical, crowned with a two-celled, opercular, deciduous anther, containing two pollen masses, united to a very short pedicle or lobe at the base, attached at the margin of a hemispherical cavity (the *stigma*) just below the anther, filled with a viscid liquor, into which if the pollen masses are immersed they are almost instantaneously dissolved.

The first notice we have of this rare and beautiful plant, belonging to the natural order of *orchideæ*, is in ANDREW'S Botanist's Repository. The drawing was made by our lamented

mented friend, the late Mr. SYDENHAM EDWARDS, from a fine plant, communicated by Messrs. LODDIGES and SONS in July 1812, and our description drawn up at the same time.

Native of the East Indies. Introduced by the Right Hon. Sir JOSEPH BANKS, Bart.

N.2196.

Aconitum septentrionale, β. carpaticum
Carpathian Wolfs-bane.

Class and Order.

Polyandria Trigynia.

Generic Character.

Cal. 0. *Petala* 5, supremo fornicato. *Nectaria* 2, pedunculata, recurva. *Siliquæ* 3. s. 5.

Specific Character and Synonyms.

Aconitum *septentrionale;* galea conica, foliis palmatis quinque-lobatis: lobis cuneiformibus inciso-dentatis, pedicellis basi bracteatis.

(α.) *caule foliisque pubescentibus.*

Aconitum septentrionale. *Koelle Acon.* 22. *Willd. Sp. Pl.* 2. *p.* 1235. *Hort. Kew. ed. alt.* 3. *p.* 322.

Aconitum *Lycoctonum* β. flore cæruleo. *Reich. Syst. Veg.* 2. *p.* 615. *Flor. Dan. t.* 123.

Aconitum *Lycoctonum* floribus pallide cæruleis. *Gm. Sib.* 4. *p.* 189 *?*

(β.) carpaticum; *caule foliisque glaberrimis, corollis lurido-purpureis.*

Aconitum *Lycoctonum* β. *cæruleum;* floribus cæruleis, herba floribusque magis elongatis, foliis profundius et distinctius palmatis. *Wahlenb. Fl. carpat.* 163.

Descr. *Stem* flexuose, angular, quite smooth. *Leaves* smooth, veined, dark green on the upper, and pale on the under, side, palmate, 5-lobed: *lobes* wedge shaped, incised: *footstalks* channelled, embracing the stem. *Flowers* in terminal racemes, of a lurid purple colour mixed with green, supported on very short pedicles, with three small subulate *bractes,* generally all close to or very near the base. The 5 *petals*

5 *petals* are all connivent: the *upper one (galea)* conical, terminated in a long tube, nearly straight, obtuse: *lateral petals (alæ)* roundish: *lower petals* slightly bearded, not pendent, as in most of the species. These petals are called segments of the calyx by Jussieu and De Candolle, who give the name of petals to the small coloured scales surrounding the germen, which are wanting in this species, and to the two singular bodies inclosed within the tube of the galea called by Linnæus *Nectaria*, which are supported on long pedicles or claws terminated by a horn-shaped body (*Cucullus* of Willdenow) forming at one end a sort of spur (*calcar* of De Candolle) and expanded at the other into a border or lip *(labium)*. In our plant this part is recurved at the spur and truncate, and slightly emarginate at the lip. *Filaments* dilated and cohering at the base. *Germens* 3, oval. *Style* shorter than stamens, *Stigmas* 3, simple. *Capsules* 3, recurvedly divaricate.

This variety is a native of the Carpathian Mountains and first described by M. Wahlenberg who has published an excellent Flora of those regions, but is considered by him as only a variety of Aconitum *Lycoctonum*; he observes however that the two continue distinct from one another, and are never found intermixed. Aconitum *septentrionale* α. a native of Norway, Russia, and Siberia, differs from our present plant in being pubescent, and also apparently in the shortness and recurvature of the galea or casque, which part is long and nearly straight; or what curvature it has is downward, contrary to what takes place in Pallas's specimen of *septentrionale*, preserved in Lambert's Herbarium.

A hardy perennial. Flowers in June, July, and August. Communicated by Messrs. Whitley, Brame, and Milne, of the Fulham nursery, who raised it from seeds collected in the Carpathian Mountains.

N. 2197.

ANCHUSA ITALICA. ITALIAN BUGLOSS.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, fauce clausa fornicibus. *Sem.* basi insculpta.

Specific Character and Synonyms.

ANCHUSA *italica;* floribus subæqualibus fauce barbatis, calycibus quinquepartitis fructiferis erectis, foliis lucidis strigosis. *Fl. taur. cauc.* 1. *p.* 122.

ANCHUSA *italica;* foliis lucidis strigosis, racemis bipartitis diphyllis, floribus subæqualibus fauce barbatis. *Retz. Obs.* 1. *p.* 12. *Willd. Sp. Pl.* 1. *p.* 556. *Hort. Kew. ed. alt.* 1. *p.* 289.

ANCHUSA *italica* foliis lanceolatis undulatis; summis acuminatis, squamulis faucis corollæ penicilliformibus. *Trew pl. rar. p.* 14. *t.* 18.

ANCHUSA paniculata. *Lehmann asperif.* 1. 230. *Sm. prodr. Flor. Græc.* 1. *p.* 115. *Fl. Græc. t.* 163?

ANCHUSA Alcibiadion. *Dod. pempt. p.* 629.

BUGLOSSUM foliis linguiformibus asperis, spicis supremis gemellis. *Hall. Hist. n.* 599. Exclusis synonymis.

BUGLOSSUM italicum flore cæruleo. *Hort. Eyst. Ord. Æst.* 8. *t.* 5.

BUGLOSSUM angustifolium. *Lob. ic* 1. 576.

BUGLOSSUM vulgare. *Bauh. Hist. 3. p.* 578. *Ger. emac. p.* 798.

CIRSIUM italicum. *Fuchs. Hist. fol. t.* 343.

ANCHUSA *italica,* being much the most common species in many parts of the south of Europe, has been often confounded with *officinalis,* and indeed was not distinguished from it by LINNÆUS.

Linnæus. Retzius has taken much pains in setling the synonymy of our present plant. The character first pointed out by Trew of the scales closing the faux of the corolla being erect and bearded or pencil-formed, added to that of the segments of the calyx being divided to the base, will perhaps distinguish it from every other species, unless *paniculata*, in which the same characters hold good, be considered as distinct, as has been lately alleged; though both are united by Sir James E. Smith in his Prodromus floræ græcæ, as well as by Lehmann. As we have had no opportunity of examining a living specimen of the Madeira plant we cannot take upon us to decide the question; but judging from the appearance of the specimen brought by Masson from Madeira, we should not consider that to be distinct from *italica*. At all events we think it right to retain the name of *italica* so long applied to this species, by the older botanists as well as the modern, in preference to that of *paniculata;* although it is a native not of Italy only, but also of Swisserland, France, Spain, Portugal, Greece, the country about Algiers and Tunis, and perhaps of the island of Madeira. The figures of Dodonæus, Lobel, and Gerard, all from the same block, are good representations of our plant.

A hardy perennial. Flowers most part of the summer. Communicated by Mr. Anderson from the Chelsea garden.

JASIONE PERENNIS. PERENNIAL SHEEPS-BIT.

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Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Involucr. 10-fidum. *Cal.* 5-partitus. *Cor.* 5-petala, regularis. *Antheræ* basi cohærentes. *Caps.* infera, bilocularis, polysperma.

Specific Character and Synonyms.

JASIONE *perennis;* foliis linearibus sublævibus planis obtusiusculis. *Lam. Encycl.* 3. *p.* 216. *Illustr. Gen. t.* 724. *f.* 2.

JASIONE *montana*, β. *perennis*, radice perenni. *Linn. Suppl. p.* 392. *Willd. Sp. Pl.* 1. *p.* 889.

DESCR. *Root* perennial, putting forth several upright simple stalks, bearing each a single hemispherical, finally globular, capitulum of flowers, the lower part clothed with linear, obtuse leaves, quite smooth except a few hairs at the edge towards the base, neither toothed nor undulate; the upper part naked, angular, forming a peduncle from four to six inches long. *Involucrum* of about ten lozenge-shaped leaves, serrate. *Calyx* superior, persistent 5-tooth: teeth subulate. *Corolla* 5-cleft: *laciniæ* linear, filiform. *Stamens* 5, shorter than the corolla. *Anthers* oval, bursting before the expansion of the corolla, as in most *campanulaceæ*, but, as far as we could observe, at no time united, as in *montana*. *Germen* inferior, 2-celled. *Style* after impregnation lengthening beyond the corolla. *Stigma* club-shaped, villous, finally bifid.

It has been much doubted whether this is a distinct species or only a mere variety of JASIONE *montana;* but if our observation of the anthers being always distinct is correct, it can

can no longer be doubtful. It is also a larger, smoother plant; and after a cultivation of more than ten years M. LAMARCK found it to continue distinct.

Native of the South of France. Flowers in July and August. Communicated by Mr. JENKINS from his Botanical garden in the New Road.

N 2199

J. Curtis Del.

Pub. by S. Curtis, Walworth, Jamaica.

Vol. XXI.

Dodartia Orientalis. Oriental Dodartia.

Class and Order.

Didynamia Angiospermia.

Generic Character.

Cal. 5-dentatus. *Cor.* labium inf. duplo longius. *Caps.* 2-locularis, globosa.

Specific Character and Synonyms.

Dodartia *orientalis;* foliis linearibus integerrimis glabris. *Sp. Pl.* 883. *Willd.* 3. *p.* 355. *Hort. Kew ed. alt.* 4. *p.* 52. *Flor. taur. cauc.* 2. *p.* 84. *Gmel. Sib.* 3. *p.* 200. *n.* 9. *Mill. ic. t.* 127.
Dodartia orientalis flore purpurascente. *Tourn. Corol. p.* 47.—*It.* 3. *t.* 208. *Engl ed.* 3. *p.* 188. c. icone.
Coris juncea aphyllos. *Amm. Ruth. N.* 46. *t.* 5.

This singular plant, which is more curious than beautiful, was first discovered by Tournefort in his travels in the Levant, near a monastery in the neighbourhood of Mount Ararat. This celebrated botanist gave it the name of Dodartia, in honour of M. Dodart, of the Royal Academy of Sciences, at that time physician to the then Dowager Princess of Conti, and afterwards to the King. M. Dodart, he remarks, was one of the most learned men of his age, and equally esteemed for his modesty and integrity. It is also found very plentifully in salt-marshes in Caucasus.

A hardy perennial. Cultivated by Philip Miller in 1752. Flowers July and August. Communicated by Messrs. Whitley, Brame and Milne.

N.220.

VERBENA LAMBERTI. LAMBERT'S VERVAIN.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cor. limbus subbilabiatus, 5-lobus, inæqualis. *Stam.* inclusa. *Utriculus* evanidus. *Sem.* 2—4.

Specific Character and Synonyms.

VERBENA *Lamberti;* tetrandra, spicis laxis solitariis, caule hispido decumbente radicante, foliis oblongis inciso-dentatis apice integerrimis.
VERBENA Aubletia. *Bot. Reg.* 294.
VERBENA bracteosa. *Pursh, non vero Michaux.*

In the 8th volume of this work, No. 308, there is a figure of Verbena *Aubletia;* from which we do not scruple to consider this as a distinct species; for although it is not very easy, perhaps, to find very good diagnostic characters, yet whoever has carefully compared the two plants cannot hesitate to pronounce to which he should refer any, even small specimen, that may be offered to him. The stem of *Aubletia* is almost constantly erect, and shows no disposition to creep; of *Lamberti* decumbent, and throws out roots wherever it touches the ground; the leaves of the former in length seldom greatly exceed their breadth: of the latter they are frequently three times longer than broad, and the point of the leaf has no incision for some way down. Our plant is also much more hairy, and its spikes of flowers are usually much longer, and very sweet scented, which those of *Aubletia*, we believe, are not.

Mr. LAMBERT, to whom we are indebted for the living specimen from which our drawing was taken, informs us that a whole border of this plant in the open ground in his

garden

garden at Boyton survived the winter of 1818, without protection; but that last year nearly the whole perished from the severity of the frost.

It appears by the Flora Peruviana of Ruiz and Pavon, that there are some other species of Verbena, which have as near an affinity with V. *Aubletia* as the present species, which was brought from Carolina by the late Mr. Lyon, and was considered by Mr. Pursh as the *bracteosa* of Michaux, with the character of which, however, it does not at all agree. Flowers in June, July and August.

CUPHEA CIRCÆOIDES. ENCHANTER'S NIGHT-SHADE-LIKE CUPHEA.

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Class and Order.

DODECANDRIA MONOGYNIA.

Generic Character.

Cal. 6—12-dentatus: basi hinc gibbosa. *Petala* 6, calyci inserta. *Caps.* 1-locularis, hinc cum calyce longitudinaliter dehiscens. BROWN *in Hort. Kew.*

Specific Character.

CUPHEA *circæoides;* racemo terminali: pedicellis sparsis, bracteis linearibus, foliis ovatis petiolatis pubescentibus. *Smith, Mss.*

We were favoured with a living plant of this new species of CUPHEA by Mrs. MACKIE, from her nursery in Norwich; who raised it from seeds given her by Sir JAMES E. SMITH. Our friend Sir JAMES informs us, that he picked the seeds from his only specimen, given him by WM. SWAINSON, JUN. Esq. who discovered it growing in shady places at Pernambuco in South America, where, however, it is very rare.

Sir JAMES has further informed us, that it is a tender annual, requiring the heat of the stove; that "it differs from CUPHEA *decandra* of the Hortus Kewensis in having an erect herbaceous stem, elongated foot-stalks, downy like the leaves and branches, alternate flowers and linear bracteas; while C. *decandra* has a shrubby, diffuse, smooth stem, opposite flowers, and roundish stalked, bracteas.

"CIRCÆA *racemosa* (LYTHRUM *racemosum* Linn. Suppl.) which is nearest to *circæoides*, has a diffuse, apparently herbaceous stem, opposite flowers and bracteas like those of *decandra*,

decandra, leaves rough-edged, smooth on the surface, on short footstalks."

The petals in our specimen were very minute, perhaps not properly developed from deficiency of heat. Flowers in September. Propagated by seeds only.

N.2202.

J. Curtis Del. Pub. by S. Curtis, Walworth, Dec 2 1810. W. Lizars Sc.

DENTARIA PENTAPHYLLA. FIVE-LEAVED TOOTH-WORT.

Class and Order.

TETRADYNAMIA SILIQUOSA.

Generic Character.

Siliqua elastice dissiliens valvulis revolutis. *Stigma* integrum. *Cal.* longitudinaliter connivens.

Specific Character and Synonyms.

DENTARIA *pentaphyllos;* foliis digitatis. *Hort. Kew. ed. I. v. 2. p. 387. Willd. Sp. Pl. 3. p. 480. Persoon Syn. 2. p. 195.*

DENTARIA foliis summis digitatis. *Sp. Pl.* 912.

DENTARIA digitata. *Lam. Encycl. 2. p. 268. D. C. flor. franç. 4. p. 686.*

CARDAMINE *pentaphylla;* caule simplicissimo apice triphyllo, foliis quinato-digitatis: foliolis elliptico-lanceolatis inciso-serratis, corolla staminibus duplo longiore. *Hort. Kew. ed. alt. 4. p.* 101.

DENTARIA pentaphylla foliis mollioribus. *Garid. Prov.* 152. *t.* 29.

DENTARIA foliis quinis digitatis. *Hall. Hist. n.* 469.

DENTARIA pentaphyllos. *Bauh. pin.* 322. *Clus. Hist. 2. p. 162. f.* 1. and 2.

SAXIFRAGA montana, radice squamis s. nodis denticulatis insignis. *Gesn. fasc.* 1. *t.* 1. *f.* 1. *fig. opt.*

VIOLA dentaria prima. *Dod. Pempt.* 162. *fig. bona.*

ALABASTRITES nemoralis alpina herbariorum. *Lob. ic.* 686. *f.* 1.

The genus DENTARIA has been united by Mr. BROWN, in the Hortus Kewensis, to that of CARDAMINE. But there is something in the general aspect of all the species hitherto referred to Dentaria, so peculiarly different from Cardamine, to

to say nothing of the singular apparatus about the root, that however difficult it may be to find proper generic characters to distinguish them by, we feel quite unwilling to give up a name by which these plants have been so long generally known.

The roots of all the species of DENTARIA are more or less scaly. In our plant the scales are fleshy, cordate, concave, at first white, but turning to a dull purple with age.

A hardy perennial. Propagated by dividing the root. Flowers in April, May and June. Communicated by ROBERT BARCLAY, Esq. of Bury Hill.

J. Curtis Del.

Pub. by S. Curtis. Walworth. Jan. 1 1820.

Weddell. Sc.

ONCIDIUM FLEXUOSUM. ZIG-ZAG ONCIDIUM.

Class and Order.

GYNANDRIA MONOGYNIA.

Generic Character.

Labellum explanatum, lobatum, basi tuberculatum. *Petala* patentia (2 antica nunc connata). *Columna* alata. *Massæ pollinis* 2, postice bilobæ; medio affixæ processu communi stigmatis. *Br. in Hort. Kew.*

Specific Character and Synonym.

ONCIDIUM *flexuosum;* labello bilobo guttato lacinias multoties superante, bulbis ovatis compressis basi apiceque foliatis, scapo paniculato: pedicellis divaricatis, radice repente. ONCIDIUM flexuosum. *Lodd. Cab. n.* 424.

This beautiful Oncidium is in many respects similar to the one published at No. 1491, under the name of ONCIDIUM *bifolium*, but differs in having a panicled scape, flattened bulbs which are furnished with leaves at their base as well as at their point. The *labellum* is larger in proportion to the other laciniæ of the corolla, more exquisitely two-lobed and covered with minute red dots.

Native of Brazil. Flowers in June and July, and the blossoms continue for six weeks or longer before they drop. Requires the constant heat of the stove. Introduced by Messrs. LODDIDGES and SONS, and published, under the name which we have adopted, in their Botanical Cabinet.

N.2204.

Fig. 1.

P. Syme. Del.

Pub by S. Curtis Walworth, Jan. 2. 1822.

Woodall Sc.

ARETHUSA BULBOSA. BULBOUS ARETHUSA.

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Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Labellum inferne cum columna connatum; superne cucullatum; intus cristatum. ***Petala*** 5, basi connata. ***Pollen*** angulatum. ***Brown in Hort. Kew.***

Specific Character and Synonyms.

ARETHUSA *bulbosa;* radice globosa, scapo vaginato unifloro, petalis interioribus incurvatis, labello subcrenulato.

ARETHUSA bulbosa. *Hort. Kew. ed. alt.* 5. *p.* 205. *Lam. Encycl.* 1. *p.* 242.

ARETHUSA *bulbosa;* radice globosa, scapo vaginato, spatha diphylla. *Sp. Pl.* 1346. *Willd. Sp. Pl.* 4. *p.* 80. *Lam. Illustr. t.* 729. *f.* 1. *ex Plukenetio.*

ARETHUSA *bulbosa;* aphylla, radice bulbosa, scapo vaginato unifloro, calycis laciniis superioribus incurvatis, labello subcrenulato. *Michaux Fl. amer. bor.* 2. *p.* 160. *Pursh Fl. amer. sept. p.* 890.

HELLEBORINE mariana monanthos, flore longo purpurascente liliaceo. *Pluk. Mant.* 100. *t.* 348. *f.* 7.

For the drawing of this very rare plant we are indebted to Dr. ROBERT GRAHAM, Professor of Botany in the university of Edinburgh. It flowered in the Botanic garden in June last and continued in blossom about a fortnight. The bulb was imported from Canada, and arrived early in December 1819. We believe no representation of this plant has been published except that by Plukenet, from a dried specimen, and LAMARCK's figure in his illustrations of the genera, which appears to be a copy of the former.

The

The plant is, as Professor GRAHAM observes, not strictly aphyllous, but has three or four leaves, sheathing the scape and one another, but with little or no expanding portion. Whether these sheaths all arise from the root, or from the stalk itself was not ascertained. In the former case only the term scape is strictly applicable.

Fig. 1. Represents the whole plant above the ground with the flower in its greatest perfection.

2. A back view of the flower when it began to fade, at which time the germen was considerably lengthened.
3. The spathe after the flower was removed.
4. The column shewing the pollen mass overhanging the stigma.
5. The same with the pollen mass turned up to shew its attachment.
6. The bulb, taken after the plant was decayed.

N. 2205.

Convolvulus bicolor. Two-coloured Bind-weed.

Class and Order.

Pentandria Monogynia.

Generic Character.

Cor. campanulata, plicata. *Stigm.* 2. *Caps.* 2-locularis: loculis dispermis.

Specific Character and Synonyms.

Convolvulus *bicolor*; volubilis, pubescens, foliis cordatis angulatis; pedunculis axillaribus unifloris, bracteis linearilanceolatis calyci involucriformi approximatis.
Convolvulus bicolor. *Hort. Bengal. p.* 14.
Convolvulus involucratus. *Bot. Reg.* 318. *vix Willdenovii.*

Convolvulus *bicolor* is a native of Bengal and probably of the Mauritius. It appears by the catalogue of the Calcutta garden to be an herbaceous perennial, and to flower there in the rainy season; with us it seems to be annual and to blossom in May and June in the stove. As in Convolvulus *Turpethum* the two outer segments of the calyx are much larger than the three internal ones which they enclose, but are not fleshy as in that. There is a particularity pointed out by Mr. Herbert in the Corolla of this plant that we have not observed in any other species of Convolvulus, which is, that the stamens are supported on five projecting bridges or valves crossing the mouth of the tube, much in the same way as those of Campanula arise from the points of arched valves at the bottom of the tube: betwixt these valves appear five, transparent, yellowish cells.

Convolvulus *involucratus* of Willdenow is a native of Guinea, and a specimen of it is preserved in the Banksian herbarium,

herbarium, which was collected in that country by Professor Afzelius. As far as we can judge from an imperfect specimen, and a description not more perfect, we cannot think that our plant is the same as that; we therefore prefer the name by which it is recorded in the catalogue of the Calcutta garden, and under which we received a specimen of the same species from the late Dr. Heyne; in which the peduncles were constantly single-flowered as in both Mr. Herbert's and Sir Abraham Hume's plants.

Our drawing was made from a sketch of a seedling plant by the Hon. William Herbert, transmitted to us with a flower and part of the foliage, early in May 1819.

N2206.

VICIA ONOBRYCHIOIDES. SAINT-FOIN VETCH.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Stigma latere inferiore transverse barbatum.

Specific Character and Synonyms.

VICIA *onobrychioides;* pedunculis multifloris folio longioribus, floribus distantibus, foliolis linearibus, stipulis semisagittatis lineari lanceolatis basi dentatis. *Willd. Sp. Pl.* 3. *p.* 1099. *Hort. Kew. ed. alt.* 4. *p.* 312.

VICIA *onobrychioides;* pedunculis multifloris, floribus distantibus, foliolis linearibus, stipulis inferne denticulatis. *Sp. Pl.* 1036. *Allion. pedem. n.* 1198. *t.* 42. *f.* 1. *Desfont. Atl.* 2. *p.* 163. *De Cand. Flor. franc.* 4. *p.* 591.

VICIA foliis ellipticis, floribus racemosis erectis, stipulis argute dentatis. *Hall. Hist. n.* 425.

VICIA onobrychidis flore. *Bauh. Pin.* 345.—*prodr.* 149.

DESCR. *Root* annual. *Stems* climbing, square. *Leaves* pinnate, terminated with a branched tendril: *leaflets* linear, obtuse, mucronate, from ten to fourteen. *Stipules* semisagittate, toothed at the base; superior ones frequently cuspidate. *Peduncles* axillary, twice the length of the leaves. *Flowers* in a secund raceme, large, distant. *Calyx* bilabiate: *teeth* acute, those of the lower lip longer than the upper. *Vexillum* much longer than the alæ and carina. *Stamens* all united. *Germen* linear, straight, many-seeded. *Style* rising at a right angle. *Stigma* obovate, hairy all round.

VICIA *onobrychioides* resembles VICIA *Cracea* in habit and foliage, but is at once distinguished from it by the much greater size and paucity of the blossoms, and by the proportionate shortness of the alæ. In as much as the stigma is hairy

hairy all round, and not on the under side only, and the filaments are all connected, it even deviates from the characters of the genus.

An ornamental, hardy annual. Flowers in May, June, and July. Introduced in 1789 by Mr. John Hunniman. Communicated by Mr. Jenkins from his Botanical garden in the New-Road.

N2201.

Pub. by S. Curtis Walworth. Jamaica.

Waddell Sc.

Saxifraga irrigua. Fountain Saxifrage

Class and Order.

Decandria Digynia.

Generic Character.

Cal. 5-partitus. *Cor.* 5-petala. *Caps.* 2-rostris, 1-locularis, polysperma.

Specific Character and Synonyms.

Saxifraga *irrigua*; foliis palmato-quinquepartitis: lobis incisis; caulinis digitatis, caule paniculato diffuso, petalis oblongis calyce plus duplo longioribus, stylis filiformibus *Marsch. a Bieb. fl. taur-cauc. v. 2. p.* 460.—*v.* 3. *p.* 295. *Poir. Suppl. encycl. v.* 5. *p.* 75.

Saxifraga aquatica. *Fl. taur-cauc. n.* 784; nomine inter addenda mutato.

Saxifraga *petræa;* foliis radicalibus palmato-quinquepartitis: lobis lateralibus coalescentibus multifidis, caule paniculato laxo. *Gouan Illustr. p.* 29. *t.* 18. *f.* 3??

Saxifraga irrigua. *Marsh. Cent. pl. rar. ross.* 2. *t.* 73. *Steven de saxifr. cauc. in. Mem. Mosq.* 4. *p.* 82 *n.* 12.

The whole plant is covered with glandular hairs, which secrete a viscid juice.

The figure quoted from Gouan's illustrations, though said by Marschall, in his Flora taurico-caucasica, to be a good representation, is very doubtful, and probably belongs to Saxifraga *aquatica,* which this excellent botanist at first considered to be the same species with his plant, afterwards separated from it under the name of *irrigua.* We have not been able to see the figure in the Century of rare Russian plants by the same author: that part not being yet arrived in this country as far as we have learnt.

Our drawing was made from a plant raised in the Chelsea garden from seeds, sent by Dr. Fischer from Gorenki, and communicated to us by Mr. Anderson, the worthy Curator of that excellent establishment.

Pub. by S. Curtis, Walworth, Jan. 2, 1815.

Crinum defixum. Deep-rooted Crinum.

Class and Order.

Hexandria Monogynia.

Generic Character.

Tubus cylindricus, germine directè continuatus eoque gracilior, limbo sæpe longior, emarcescente limbo plerumque magnâ parte persistens. *Limbus* ante expansionem nutans vel inclinatus. *Laciniæ* alternæ æquales, cæteris sæpe dispares. *Filamenta*, vix extra faucem tubi, corollæ pariter inserta. *Stigma* trigonum, plerumque vix divisum, aliquando trilobatum. *Germen* mediâ parte crassius, 3-loculare, loculis 1—31-spermis, sessile vel pedunculo directè continuatum. *Capsula* difformis, dissepimentorum destructione 1–2 locularis. *Semina* carnosa, viridia, sæpius magna et difformia.

Folia plerumque multiforia. W. H.

Specific Character and Synonyms.

Crinum *defixum;* bulbo oblongo, foliis rigenter erectis margine glabriusculis scapo longioribus, laciniis lineari-loratis tubo brevioribus, germinie subsessili.

Crinum *defixum, supra N.* 2121. *p.* 5. *Ker in Journ. Sc. and Arts. v.* 3. *p.* 105.

Crinum *asiaticum. Hort. Bengal. p.* 23. *Roxburg M. S.*

Belutta-pola-taly. *Rheede Hort. Malab.* 11. 75. *t.* 38.

Descr. *Bulb* stoloniferous, oblong-spherical, about two inches diameter above ground, when cultivated bright green: growing naturally in the deep mud of water-courses in Bengal, in which situation the neck of the bulb is necessarily prolonged till it reaches the surface in a cylindrical form. *Leaves* shining, from two to three feet long, with a tapering blunt point, about an inch wide, the lower part deeply channelled like a half cylinder, the margin bristled with a few minute points. *Scape* generally shorter than the leaves, coloured on one side. *Germen* without peduncle: cells originally one or two seeded. *Tube* from three and a half to perhaps six inches long, tinged with red. *Limb* nodding before its expansion and faintly coloured on the outside. *Laciniæ* a little more than a quarter of an inch wide, more or

less

less than three inches long, white. *Filaments* spreading in the channels of the corresponding petals with their points curved inwards; *anthers* dark brown, versatile; *pollen* orange. *Style* inclined, coloured as well as the filaments one half of its length, and both an inch shorter than the limb. *Stigma* a whitish fimbriated point, when perfect minutely three-lobed, like that of C. *flaccidum*. *Umbel* with six to ten flowers, fragrant at night. *Seeds* flatter than in most species.

Dr. Roxburgh observes that although the germen is subsessile, the capsule is occasionally protruded on a short peduncle. In our plant the germen and ripe capsules were absolutely sessile; in Crinum *erubescens* however, of which the germen is in general almost sessile, that of a seventh central flower is occasionally on a peduncle nearly two inches long; so that it is very possible that Crinum *defixum* may vary in the manner he has stated.

This very elegant species thrives in our stoves with the bulb entirely above ground and stript of all its obsolete coats, under which treatment it is of the same glossy green as the leaves. In the summer time it should be plunged in water just deep enough to cover the bulb. Strong bulbs will flower twice between June and October. The length of the tube of Crinum *defixum* varies much in different flowers produced by the same bulb; in our specimen it was three inches and a half. In all the species of Crinum of which the limb nods before its expansion, the tube appears to be permanent while the seed is ripening; in those of which the limb is only inclined without nodding, the tube perishes in great part and sometimes entirely. The nodding and inclination of the limb do not take place if the plants are removed into a low temperature; and it seems probable that in the species of which the tube is very strong, it resists the influence of the light and heat which in that case acts upon the limb entirely; while in those, of which the tube is less rigid, it yields a little, and the limb is less powerfully affected. It is a singular feature of the genus Crinum that some species have the cells *originally* monospermous, some two seeded, some four seeded, and others polyspermous, but with so much variation that C. *flaccidum* has seven ovula in each cell and C. *capense*, which is closely allied to it, from twenty-seven to thirty-one in each cell; and that the monospermous and polyspermous sorts breed as freely together as those which might be thought more nearly allied. *W. H.*

For the whole of this article, as well as for the drawing, we are indebted to the Rev. and Hon. William Herbert.

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a. The bulb, natural size with a stolon issuing from it. b. A seed.
c. A miniature of the whole plant, shewing the line of water.

Pub. by S. Curtis. Walworth. Black.

Waddell Sc.

RICINUS COMMUNIS. THE PALMA CHRISTI, OR CASTOR-OIL PLANT.

Class and Order.

MONŒCIA MONADELPHIA.

Generic Character.

MASC. *Cal.* 5-partitus. *Cor.* 0. *Stamina* numerosa.
FEM. *Cal.* 3-partitus. *Cor.* 0. *Styli* 3, bifidi. *Caps.* 3-locularis. *Sem.* 1.

Specific Character and Synonyms.

RICINUS *communis;* foliis peltatis palmatis: lobis lanceolatis serratis, stigmatibus tribus bifidis bipartitisve, capsulis echinatis.

RICINUS *communis;* foliis peltatis subpalmatis serratis. *Lin. Sp. Pl.* 1430.—*Mill. icon. t.* 219 & 220.

RICINUS *communis;* foliis peltatis palmatis, lobis lanceolatis serratis, caule herbaceo pruinoso, stigmatibus tribus apice bifidis, capsulis echinatis. *Willd. Sp. Pl.* 4. *p.* 564.

RICINUS foliis peltatis serratis: petiolis glanduliferis. *Hort. Cliff.* 450. *Hort. Ups.* 289. *Philos. Bot. p.* 256. *Regnault Bot.*

RICINUS albus. *Rumph. Amb.* 4. *p.* 92.

RICINUS vulgaris. *Bauh. Pin.* 439. *Blackw. Herb. t.* 148. *Cam. Epit.* 959. *Dod. Pempt.* 367. *Raj. Hist.* 166. *Park. Theatr.* 182. *Fuchs Hist. ic.* 340.

RICINUS gallis Palma Christi. *Lob. Hist.* 392. *Lob. ic.* 688. *Gerard emac.* 496.

RICINUS minor. *Hort. Eystt. ord. æstiv.* 8. *t.* 11.

AVANACU. *Hort. Malab.* 2. *t.* 32.

The older Botanists gave this plant the name of RICINUS from the similarity which the seed bears to the Tick, which loathsome animal has the same name in latin.

It is doubtful whether there is in reality any specific difference

difference between the *communis, viridis, africanus* and *lividus;* of which WILLDENOW makes as many distinct species. It seems that though an annual in temperate climates, it becomes a moderate-sized tree not only in tropical countries, but, as was observed both by CLUSIUS and RAY, also in the southern parts of Europe. MILLER thought that among the annual kinds which he cultivated himself in the Chelsea garden, he observed several species, which always kept distinct, when raised from seed year after year. Perhaps a greater attention to the stigmas and the fruit, with an opportunity of proving by cultivation, how far the characters are permanent, may decide otherwise; but at present we feel obliged to consider our plant as the RICINUS *communis;* although the stigmas are divided quite to the base, so that they might be numbered as six distinct stigmas; which in REGNAULT's figure appear bifid at the point only.

Of the modern figures, that of REGNAULT is the best. But in none of those that we have seen the stigmas are represented so much like those of our plant, as in the ancient one of FUCHS, published nearly 300 years ago. All the other figures of the older Botanists are copied from that of DODONÆUS, except BESLER's in the Hortus Eystettensis.

The oil which has been so much used of late years, as an efficacious, and at the same time gentle laxative, under the name of Castor oil is prepared from the seeds of this plant.

RICINUS *communis* is a native of both the Indies, and perhaps of the south of Europe. Cultivated in England in 1548. Flowers in June, July and August. Our drawing was taken by SYDENHAM EDWARDS, at the Chelsea garden, several years ago.

N. 2270.

VERONICA ORCHIDEA. ORCHIS-FLOWERED SPEEDWELL.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cor. limbo 4-partito: lacinia infima angustiore. *Caps.* 2-locularis.

Specific Character and Synonyms.

VERONICA *orchidea;* foliis oblongis crenatis obtusis cauleque pubescente, spica terminali, laciniis corollæ linearibus tortuosis antheras superantibus. *Wahlenb. Fl. carpat. p. 4.*

VERONICA *orchidea;* foliis oppositis cauleque pubescentibus; radicalibus oblongo-obovatis crenatis in petiolum decurrentibus; caulinis oblongis crenato-serratis subsessilibus, laciniis corollæ lanceolatis acutis tortuoso-conniventibus. *Besser Galic. n.* 13. *Flor. taur.-cauc.* 3. *p.* 9. *Roem. et Sch. Syst. veg.* 1. *p.* 94. *n.* 28.

DESC. *Stem* upright, rounded, somewhat rough. *Leaves* opposite, crossed, in distant pairs, sessile, lanceolate, crenate-serrate, veined, fleshy, smooth on the upper and roughish on the under surface. *Flowers* violet-coloured, on long terminal spikes. *Bractes* linear, longer than the calyx. *Calyx* of four ovate, ciliated leaflets, the two lower ones longer than the upper. *Corolla* irregular, *tube* gibbous: *laciniæ* four: upper one broad at the base, acuminated, the other three linear, variously twisted, all emarginate: *faux* hairy. *Stamens* on very short *filaments: anthers* large, purple, didymous with the lobes united at the apex only, just appearing above the orifice of the tube. *Germen* nearly globular. *Style* shorter than calyx. *Stigma* obtuse.

It

It is doubted, both by Wahlenberg and Marschal *v.* Bieberstein, whether this plant is not a mere variety of Veronica *spicata*. We cannot but think, however, that it is decidedly distinct, not only from the slender tortuous laciniæ and the greater length of the bractes, but especially from the extreme shortness of the stamens; the anthers but just emerging from the faux of the corolla and lying close together at the base of the upper and broader laciniæ; which, occasioning a sort of resemblance to the flower of an orchis, gave rise as we suppose, to the specific name. It must be observed, however, that according to the last-mentioned author, these characters are not constant.

We believe that no figure was (before) extant of this plant, and that it is quite new in this country, being raised by Mr. Kent, of Clapton, from seeds received by him from Dr. Fischer, of Gorenki, in 1819.

A hardy perennial, native of Caucasus, and of the Carpathian mountains, growing in warm and dry situations. Communicated by Mr. Kent, in July 1820.

J. Curtis Del.

Publ. by S. Curtis, Walworth. Feb. 2 1810.

W. Lodd. sc.

SYMPHORIA RACEMOSA. SNOW-BERRY.

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Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Germen 4-loculare: loculis 2, polyspermis, sterilibus; 2 monospermis, fertilibus. *Bacca* coronata. *Cor.* tubulosa, brevis, 5-fida, subæqualis. *Cal.* 5-dentatus. BROWN. *Loniceræ sp.* LIN.

Specific Character and Synonyms.

SYMPHORIA *racemosa;* racemo interrupto subterminali, corolla intus barbata.

SYMPHORIA *racemosa;* racemo terminali, corolla intus barbata. *Persoon Syn.* 1. *p.* 214. *Michaux Flor. Bor. Amer.* 1. *p.* 107. *Pursh Fl. Amer-sept.* 1. *p.* 162.

SYMPHORIA racemosa. *Lodd. Cab.* 230. *Nuttall Gen. Pl. Amer.* 1. *p.* 139.

CAPRIFOLIUM, PERICLYMENUM, CHAMÆCERASUS, XYLOSTEON and DIERVILLA of TOURNEFORT, as well as SYMPHORICARPOS of DILLENIUS were united by LINNÆUS into one genus, under the name of LONICERA. Later botanists, however, seem generally to concur in restoring the three last to the rank of distinct genera.

Our present plant belongs to DILLENIUS's genus Symphoricarpos, changed by PERSOON to SYMPHORIA; a genus established from SYMPHORIA *conglomerata,* the LONICERA *Symphoricarpos* of LINNÆUS.

SYMPHORIA *racemosa* was first mentioned by MICHAUX, and a figure of it has been lately published by Messrs. LODDIGES and SONS in their Botanical Cabinet, where it is stated, that they first received it in the spring of 1818, from Mr. ROBERT CARR.

DESCR. A low bushy shrub; bark of the branches brightish brown. *Leaves* opposite, round-ovate with a mucro, mostly quite entire, but on the lower part of the shrub sometimes irregularly

irregularly notched, smooth, glaucous. *Flowers* grow on the slender, terminal branches in pairs, at first distant, but toward the extremities crowded together, supported on very short pedicles; sometimes the branch becomes leafy beyond the flowers. *Calyx* superior 5-toothed, as it often, if not generally, is in S. *conglomerata*, though described to be 4-toothed. *Corolla* rose-coloured, campanulate; *limb* 5-cleft, obtuse: faux filled with hairs, below which the *tube* abounds with honey. *Stamens* 5, inserted at the upper part of the tube, shorter than the corolla with the laciniæ of which they alternate. *Germen* ovate, with two or three small bractes applied close to its base. Mr. Brown has observed that it is four-celled, 2 of the cells bearing each several ovula, but which are always abortive; the other two have each a single seed, which alone come to maturity. An analogous circumstance takes place, he observes, also in the fruit of Linnæa, and of Abelia, two nearly related genera belonging to the same family, the *caprifoliaceæ;* in both which the germen is 3-celled, two of the cells having several imperfect ovula, and the other a single ovulum, which alone comes to maturity.*

The mature berry of Symphoria *racemosa* appears to be only 2-celled, the expansion of the fertile cells obliterating the others. Each cell contains a kidney-shaped seed, much smaller than the cavity containing it.

Native of Upper Canada, and the banks of the Missouri. Flowers in July, August and September, succeeded by large snow-white berries, which hang till the approach of winter It is perfectly hardy. Communicated in July last by Messrs. Whitley, Brame and Milne, of the Fulham Nursery.

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* Vide characters and descriptions of three new species of plants, found in China, by Clarke Abel, Esq. by Robert Brown, F. R. S.

N2212.

Pub. by S. Curtis. Walworth. Feb 1 1810.

GASTROLOBIUM BILOBUM. TWO-LOBED GASTROLOBIUM.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, bilabiatus, ebracteatus. *Cor.* papilionacea, petalis longitudine subæqualibus. *Germen* dispermum, pedicellatum. *Stylus* subulatus, adsendens. *Stigma* simplex. *Legumen* ventricosum *Semina* strophiolata. BROWN.

Specific Character and Synonyms.

GASTROLOBIUM *bilobum;* foliis (uncialibus) subtus subsericeis retusis; lobulis rotundatis mucronulo longioribus, leguminis pedicello tubum calycis æquante. *Brown in Hort. Kew. ed. alt* 3. *p.* 16. *Bot. Reg.* 411.

GASTROLOBIUM *bilobum,* is a handsome shrub which blossoms freely in the summer months, bearing its flowers in terminal umb ls, which are surrounded in manner of an involucrum, by the fine green foliage, silky underneath. The other leaves grow in irregular whorls on the stem.

The specific character was framed by Mr. BROWN, to distinguish it from another species collected by him, in which the leaves are truncated at the point.

Native of the South-west coast of New Holland, where it was discovered by Mr. ROBERT BROWN. Introduced into the Kew Garden in 1803. Communicated by Messrs. LODDIGES and SONS, in July last.

N 2213

J. Curtis. Del. Pub. by S. Curtis, Walworth. Feb. 1. 1826. Waddell. Sc.

HEDYSARUM ALPINUM. ALPINE HEDYSARUM.

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Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 5-fidus. *Cor.* carina transverse obtusa. *Lomentum* articulis monospermis compressis.

Specific Character and Synonyms.

HEDYSARUM *alpinum;* caulescens erectum, foliis pinnatis ovato-lanceolatis glabris, racemis elongatis axillaribus, bracteis pedunculo brevioribus, articulis lomenti penduli glabris. *Willd. Sp. Pl.* 3. *p.* 1207.

HEDYSARUM *alpinum;* foliis pinnatis, leguminibus articulatis glabris pendulis. *Sp. Pl.* 1057. *Hort. Upsal.* 232.

HEDYSARUM saxatile, siliqua lævi, floribus purpureis, inodorum. *Amm. Ruth.* 116. *n.* 152. 153.

HEDYSARUM foliis pinnatis, leguminibus articulatis glabris pendulis, caule erecto. *Gmel. Sib.* 4. *p.* 26. *n.* 35. *t.* 10.

DESCR. *Stem* tall, branched, fluted. *Leaves* odd-pinnate: leaflets about twelve pair, ovate, obtuse with a small mucro, ribbed with parallel veins on the under side. *Flowers* crimson, in long racemes, on foot stalks longer than the leaves. *Calyx* 5-toothed: two upper teeth shortest, the lowest one longer than the rest. *Vexillum* rolled back at the sides. *Alæ* not half the length of the *carina*. *Stamens* diadelphous: *anthers* didymous. *Style* filiform: *stigma* very small, capitate. *Germen* shorter by half than the sheath of filaments, having many ovula in distinct cells. *Seed-pod* jointed.

This is a very ornamental plant from the brilliant colour of the flowers, which are produced abundantly from May to August.

A hardy

A hardy perennial. Native of Siberia. Not recorded in the last edition of the Hortus Kewensis; HEDYSARUM *alpinum* of the first edition having been determined to be the same with H. *obscurum* of LINNÆUS, a native of Switzerland, figured at No. 282 of this work. The species under consideration is much larger and handsomer

Communicated from Mr. KNIGHT's Exotic Nursery in the King's-Road in May 1819.

N 2214

J. Curtis Del.

Pubd by S. Curtis, Walworth, Surrey.

Middleton.

LEBECKIA NUDA. NAKED LEBECKIA.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 5-partitus: laciniis acutis; sinubus rotundatis. *Legumen* cylindricum, polyspermum.

Specific Character.

LEBECKIA *nuda;* subaphylla, ramulis alternis teretibus mucronatis, racemis axillaribus, corollis calycibus pedicellis que concoloribus.

DESCR. *Shrub* between two and three feet high, upright: branchlets (probably in reality the footstalks of a compound leaf, the leaflets of which are mostly abortive) rounded, terminated with a soft mucro: *leaflets* only here and there a defective one, ovate, recurved. *Flowers* purple, on axillary racemes, longer than the branchlet. *Pedicles* nodding, equal to or longer than the *calyx*, which is cupshaped, with five acute teeth all pointing downwards, whence the two upper ones are distant with a wide rounded sinus between them. *Corolla* papilionaceous, red-purple, as are the calyx and pedicle. *Vexillum* erect, spreading, obovate, having a streaked star at the base and very short claw. *Alæ* the length of the vexillum, rounded at the base. Petals of the *Carina* joined together at the apex, prolonged at the base into long, subulate, recurved spurs, whence the claw appears to be in the middle of the petal. *Stamens* diadelphous; *anthers* minutely awned, by the point of the filament projecting beyond its lobes. *Germen* linear; many seeded: *style* rising at a right angle: *stigma* capitate, lobed.

Raised from Cape-seeds in the year 1814, by Messrs. WHITLEY, BRAME, and MILNE, at the Fulham Nursey, and communicated

nicated to us in flower in October 1819, under the name of LEBECKIA *contaminata;* but it in no respect corresponds with THUNBERG's character of that species, nor indeed with the description of any recorded species, so that we are obliged to consider it as one hitherto undescribed.

Published by Sowerby & Co. Feb. 1852.

Oxalis Violacea. Violet-coloured Wood-Sorrel.

Class and Order.

Decandria Pentagynia.

Generic Character.

Cal. 5-phyllus. *Petala* unguibus connexa. *Stam.* inæqualia: 5 breviora exteriora, basi connata. *Caps.* angulis dehiscens, 5-gona.

Specific Character and Synonyms.

Oxalis *violacea;* scapo umbellifero, foliis ternatis obcordatis, calycibus apice callosis. *Sp. Pl.* 621. *Jacq. Hort.* 2. *p.* 84. *t.* 180.

Oxalis *violacea;* acaulis, scapo bifido umbellifero, floribus nutantibus, foliis ternatis obcordatis glabris, stylis staminibus exterioribus brevioribus. *Willd. Sp. Pl.* 2. *p.* 786. *Pursh Fl. Am. Sept.* 1. *p.* 322. *Hort. Kew. ed. alt.* 3. *p.* 122.

Oxalis *violacea;* foliis ternatis obsolete villosis, stylis brevissimis, filamentis interioribus æqualibus, floribus clausis cernuis, expansis erectis. *Jacq. Oxal. n.* 14. *p.* 35. *t.* 80. *f.* 2.

Oxalis *violacea;* scapis umbelliferis foliis ternatis ciliatis: foliolis obcordatis subemarginatis. *Lam. Encycl.* 4. *p.* 686. *n.* 26.

Oxalis *violacea;* scapo radicali umbellifero, pedicellis subviscido-pubentibus, calycis laciniis apice callo croceo, corolla violacea. *Michaux Fl. Bor. Amer.* 2. *p.* 39.

Oxys purpurea virginiana, radice lilii more nucleata. *Pluk. Alm.* 274. *t.* 102. *f.* 4.

Oxalis *violacea* is a native of North America, from New England to Carolina. The leaves are smooth, varying with regard to colour, sometimes quite purple on the under surface, sometimes

sometimes only slightly tinged; in plants that do not flower they grow much larger and are marked with an obscure-purple band on the upper surface also. They have a pleasant acid taste like our wood sorrel. *Scapes* longer than the leaves, terminated with a simple or divided umbel of pale-purple flowers, which are erect while expanded, but cernuous both before and after expansion. According to PLUKENET a capitulum of bulbs is sometimes formed after the flowers drop, as in the Crow-Garlick. In the flowers we examined, the pubescent *style* was twice the length of the longest stamens, but we are well convinced that the comparative length of the style and stamens is too variable a character to be depended upon to distinguish the species by.

Introduced in 1772, by Dr. SAMUEL MARTIN. Flowers most part of the summer. Communicated by Mr. JOSEPH KNIGHT of the Exotic Nursery, King's-road, in July last. Hardy, but it is safer to give it the protection of a frame in the winter season.

N.2216.

J. Curtis. Del.

Pub. by S. Curtis. Walworth. Feb. 1 1822.

Weddell. Sc.

Drypis spinosa. Prickly Drypis.

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Class and Order.

Pentandria Trygynia.

Generic Character.

Cal. 5-dentatus. *Petala* 5. *Caps.* circumscissa, monosperma.

Specific Character and Synonyms.

Drypis spinosa. *Sp. Pl.* 390. *Willd.* 1. 1513. *Persoon Syn.* 1. *p.* 331. *Hort. Kew. ed. alt.* 2. *p.* 175. *Jacq. Hort. Vind.* 1. *p.* 19. *t.* 49. *Scop. Carn.* 1. *p.* 225. *Gaert. sem.* 2. *p.* 218. *t.* 128. *f.* 12.

Drypis *spinosa;* foliis oppositis subulatis, stipulis lanceolatis dentato-spinosis. *Lam. illustr. v.* 2. *p.* 550. *t.* 214.

Drypis italica aculeata, floribus albis umbellatis compactis. *Mich. Gen.* 24. *t.* 23.

Drypis Spina alba foliis vidua. *Bauh. Pin.* 388.

Drypis Theophrasti Anguillaræ. *Lob. Hist.* 460. *Ed. Germ.* 965. *Lob. ic.* 780. *f.* 1.

Drypis *Ger. emac.* 1112.

Carduus foliis tenuissime spinosis ad instar Juniperi. *Morison Hist.* 3. *p.* 161. § 7. *t.* 32. *f.* 8.

Descr. *Stem* weak, diffuse; branched, knotted: joints hollowed on one side, convex on the other, each changing alternately; said to be biennial, but according to others becoming shrubby; the arid branches of one year throwing out green branches the next. *Leaves* opposite, subulate, flat on the upper and convex on the under side, spinescent; superior ones lanceolate, toothed at the base. *Flowers* pink-coloured or white, aggregate in dichotomous corymbs. *Calyx* tubular, 5-toothed. *Corolla* of five narrow bifid *petals* with long slender claws, crowned at the faux with two scales like those of the genus Silene. *Stamens* 5, equalling the petals. *Germen* round,

round, somewhat flattened, one-celled with two ovula affixed to the bottom of the cell; only one of which probably comes to maturity, as the capsule is described to be one-seeded. *Styles* 3. *Stigmas* simple.

Few plants are more difficult to handle with naked fingers than this, every leaf being armed with a sharp spine which with age becomes very rigid; yet the Ass eats it greedily, whence its vulgar name in its native countries signifies in English Asses herb. Native of Barbary and Italy. Flowers with us from June to September, in the open ground. Introduced by Nicholas Joseph de Jacquin, M. D. in 1775. Communicated by Mr. William Anderson from the Chelsea Garden.

The outline figures represent 1. a stamen, 2. a petal, 3 a side view of the same, 4. the pistil and the calyx; all somewhat magnified.

Bridet Del

Pubd by S. Curtis. Walworth. March. 1.1822.

Waddell Sc.

Crinum Speciosum. Specious-flowered Crinum.

Class and Order.

Hexandria Monogynia.

Generic Character.

Tubus cylindricus, germine directè continuatus eoque gracilior, limbo sæpe longior, emarcescente limbo plerumque magnâ parte persistens. *Limbus* ante expansionem nutans vel inclinatus. *Laciniæ* alternæ æquales, cæteris sæpe dispares. *Filamenta,* vix extra faucem tubi, corollæ pariter inserta. *Stigma* trigonum vel trilobatum. *Germen* mediâ parte crassius, 3-loculare, loculis 1—31-spermis, sessile vel pedunculo directè continuatum. *Capsula* sæpe difformis, dissepimentorum destructione 1—2-locularis. *Semina* carnosa, viridia, sæpius magna et difformia. *Folia* plerumque multifaria. *Vide supra No.* 2121. *W. H.*

Specific Character and Synonyms.

Crinum *speciosum;* bulbo sphærico, foliis loratis undulatis margine scabris apice obliquo acutis scapo subterete multifloro longioribus, germine sessili: loculis monospermis.

Crinum *speciosissimum. Supra No.* 2121, *p.* 6.

Descr. *Bulb* large, sphærical, reddish. *Leaves* multifarious, undulate, thong-like with a sharp oblique point, 2 or 3 feet long, 2 inches wide, deep green, with a rough margin. *Scape* roundish, 2 feet high or more, green, reddish towards the base. *Spathe* short, withering early. *Umbel* 7—20 flowered, interspersed with bractes. *Flowers* fragrant. *Tube* with obsolete angles, 3—4 inches long, green, minutely marked with red, withering with the limb. *Limb* wide-funnel-shaped,

funnel-shaped, with the points bent back, drooping before expansion. *Laciniæ* white, striped outside with red and greenish towards the base, ending with a hook, $3\frac{1}{2}$ inches long, the three inner not an inch, the three outer more than an inch wide. *Filaments* white, curved upwards; *anthers* ash coloured; *pollen* very pale yellow; *style* curved like the filaments and of the same length, red towards the end; *stigma* a white triangular point, a little divided. *Germen* short, sessile. *Cells* one-seeded. a. represents a ripe seed; b. a miniature of the whole plant.

This species was first discovered by Dr. Carey in the North of Bengal; in foliage it very much resembles Crinum *moluccanum*, but it is a plant of larger stature, and it may be easily distinguished in a young state, by a much slenderer and somewhat oblique point to the leaf.

It requires the earth in which it grows to be kept constantly moist, though it is not so impatient of sunshine as *moluccanum*. It thrives well with a pan of moist sand under it upon a warm flue, and flowers freely, especially in the autumn, usually producing two successive scapes.

It is worthy of observation, that although it nearly agrees with C. *capense* in the form of the corolla, and in the perishable tube of which scarcely $\frac{1}{4}$ of an inch is persistent, the cells which in *capense* are from 27 to 31 seeded, are in this species 1-seeded. The number of ovules varies exceedingly in the different species of most genera of Amaryllideæ, and cannot be relied upon as a generic character.

It is observable that in some specimens, or perhaps in a variety of C. *Broussoneti*, differing in no other respect, the stigma is very deeply 3-cleft. The greater or less division of a stigma which is angular or lobed appears to be a very uncertain feature. The various species of Crinum differ much in the greater or less width and expansion of the laciniæ, but there is quite as much difference between the breadth of the outer and inner laciniæ in the narrower C. *erubescens* as in C. *speciosum* or any of the broad sorts. That the laciniæ of the narrower sorts become pendulous or revolute, is probably owing to the want of breadth to support their length, upon the same principle that makes a slender slip of paper curl or hang down while a broader one remains straight.

Wm. Herbert.

Pub. for S. Curtis, Botanic Garden, Lambeth.

CALENDULA CHRYSANTHEMIFOLIA. LARGE-FLOWERED MARYGOLD.

Class and Order.

SYNGENESIA POLYGAMIA NECESSARIA.

Generic Character.

Recept. nudum. *Pappus* 0. *Cal.* polyphyllus, æqualis. *Sem.* disci membranacea.

Specific Character and Synonyms.

CALENDULA *chrysanthemifolia;* foliis cuneato-obovatis lyrato-incisis scabriusculis, caule fruticoso erecto. *Hort. Kew. ed. alt.* 5. *p.* 169. *Bot. Reg.* 40.

CALENDULA *chrysanthemifolia;* foliis obovatis sublyratis scabriusculis, caule suffruticoso. *Vent. Malm.* 56. *Pers. Syn.* 2. *p.* 492. *Lam. Encycl.* 7. *p.* 278.

This shewy shrub has very much the habit of OSTEOSPERMUM, and was formerly known in our gardens under the name of OSTEOSPERMUM *grandiflorum.* M. VENTENAT, who first described this plant as a species of CALENDULA considers it as partaking of the characters of both genera, and speaks of the florets of the disk being all barren; we did not however find that to be the case in our plant, very many of the florets of the disk having as perfect ovaria as those of the radius.

According to VENTENAT the flowers open about eleven in the forenoon, and close again by three or four in the afternoon; they are the largest in the genus, but scarcely so large as this author describes them, when he says they are twice the size of those of the China Aster.

Native of the Cape of Good Hope, requiring the protection of the Greenhouse in the winter season. Flowers freely most part of the summer. Our drawing was made many years ago in the month of April, from a plant in the nursery at Kensington, at that time belonging to Messrs. GRIMWOOD and WYKES. Introduced by Mr. MASSON in the year 1790.

N. 2219.

Pubd. by S. Curtis. Walworth. Manchester.

ARABIS NUTANS. NODDING WALL-CRESS.

Class and Order.

TETRADYNAMIA SILIQUOSA.

Generic Character.

Siliqua linearis stigmate subsessili coronata: valvis venosis *v.* nervosis. *Semina* uniseriata. *Cotyledones* accumbentes. *Calyx* erectus. BROWN *in Hort. Kew.*

Specific Character and Synonyms.

ARABIS *nutans;* foliis subdentatis; radicalibus obovatis utrinque pilosis scabris; caulinis ovalibus, racemo subnutante. *Hort. Kew. ed. alt.* 4. *p.* 105.

ARABIS *nutans;* foliis subdentatis; radicalibus obovatis; caulinis lanceolatis, caule folioso, racemo fructifero nutante, siliquis secundis. *Willd. Sp Pl. 3. p.* 537.

ARABIS *nutans;* racemo seminifero erecto apice nutante, foliis subdentatis ciliatis; radicalibus obovatis; caulinis oblongis glabris amplexicaulibus, siliquis erectis subsecundis. *Moench Method. p.* 258

ARABIS *pumila;* foliis radicalibus obovatis subdentatis obtusis utrinque scabris; caulinis sessilibus oblongis subhirsutis, racemo subnutante. *Wulfen in Jacq. Collect.* 2 *p.* 59. *Jacq. Austr. t.* 281.

ARABIS *scabra. Allioni Ped. n.* 974.

LEUCOIUM foliis radicalibus subrotundis scabris dentatis; caulinis amplexicaulibus hirsutis. *Hall. Hist. n.* 447.

CARDAMINE pumila bellidis folio alpina. *Seguir Veron.* 387.

CARDAMINES alterius æmula plantula. *Clus. Hist.* 2. *p.* 129? *Mor. Hist.* § 3. *t.* 4. *f.* 4?

ARABIS *nutans* is the *pumila* of JACQUIN, under which name it is most generally known; but MOENCH having previously described it under that of *nutans,* this name has the right

right of priority, and is accordingly adopted by WILLDENOW and in the Hortus Kewensis. LINNÆUS considered this species to be the same as his *bellidifolia*, but most botanists, who have collected the plants in their native soil, agree in regarding them as quite distinct. ARABIS *nutans* grows on the highest alps near to the region of perpetual snow; *bellidifolia* on the borders of springs and rivulets formed by the melted snow in less elevated situations. But after all we have found it impossible to select satisfactorily the synonyms as applied by different authors to one or the other.

Our plant possessed none of the roughness of the *pumila* of JACQUIN; but this may be lost by cultivation. It agrees well with MOENCH's description of his *nutans*, but not so well with that of JACQUIN's *pumila* by WULFEN; and indeed we entertain some doubts whether these authors describe the same species. Communicated by Mr. KNIGHT of the Exotic Nursery, King's Road.

N.2220.

Pub. by S. Curtis, Walworth, March 1, 1816

ARUM SPIRALE. SPIRAL-FLOWERED ARUM.

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Class and Order.

MONŒCIA POLYANDRIA.

Generic Character.

Spatha monophylla, cucullata. *Spadix* supra nudus, inferne femineus, medio stamineus.

Specific Character and Synonyms.

ARUM *spirale;* foliis lineari-lanceolatis, spadice lanceolato spatha oblongo-lanceolata spiraliter torta breviore. *Willd. Sp. Pl.* 4. *p.* 487.

ARUM *spirale;* acaule, foliis lanceolatis spatha spirali sessili. *Retz obs.* 1. *p.* 30. *n.* 104.

Our drawing of this very rare plant was taken, by the late Mr. SYDENHAM EDWARDS, at Mr. VERE's curious collection at Kensington Gore; but we had no opportunity of examining the living plant. The spadix is said by RETZ to be very short, which is probably the reason that it does not appear in the drawing; neither is it at all visible in the specimens preserved in the Banksian Herbarium. According to RETZ the ARUM *spirale* is a native of Tranquebar. Mr. VERE's plant was supposed to come from China.

N. 2221.

Pub by S Curtis Walworth Marsh 22d 22

Waddell Sc.

NICOTIANA LANGSDORFFII. LANGSDORFF'S TOBACCO.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, limbo plicato. *Stam.* inclinata. *Caps.* 2-valvis, 2-locularis.

Specific Character.

NICOTIANA *Langsdorffii;* herbacea, viscoso-villosa, foliis ovatis sessilibus decurrentibus, floribus cernuis: limbo subintegro tubo gibboso ter breviore.

NICOTIANA *Langsdorfii;* fruticosa, foliis ovatis in petiolum subdecurrentem attenuatis cauleque villoso-mollibus, floribus cernuis, limbo subintegro. *Hor. phys. Berol. t.* 10.

DESCR. *Stem* between two and three feet high, with us certainly herbaceous, clammy-pubescent. *Leaves* distant, oval, sessile, decurrent, smooth and dark green on the upper surface, villous and pale on the under. *Flowers* yellowish-green, grow in thin, naked, upright panicles, on peduncles curved at the end, which become erect when the flowers drop. *Calyx* clammy, five-toothed with one tooth longer than the rest. *Tube* of the corolla an inch long, curved, irregularly dilated at the end; *limb* generally oblique, obsoletely 5-lobed or nearly entire. *Stamens* included; *anthers* circular, flattened, two celled: *pollen* blue. *Capsules* erect, conical, two celled. *Seeds* globular.

Our drawing of this rare species was made from a specimen sent us from Mr. LAMBERT's garden at Boyton, in August 1819. We saw it also last year in the Chelsea garden, flowering freely in the open ground. Native of Chili.

N 2222.

Widdall. sc.

YUCCA STRICTA. LYON'S NARROW-LEAVED ADAM'S NEEDLE.

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Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. campanulato-patens. *Stylus* 0. *Caps.* 3-locularis.

Specific Character.

YUCCA *stricta ;* acaulis, foliis lanceolato-linearibus strictissimis apice elongatis, scapo basi ramoso: ramis simplicibus, corollis orbiculato-campanulatis.

This, as we believe, hitherto unrecorded species, was introduced from Carolina a few years ago by the late Mr. LYON, and appears to be the most desirable species of the whole genus, as it grows fast, and blossoms very freely in the open ground. The *leaves* are long, straight, and lengthened into a very tapering point, with a few scattered threads along the margin ; the *scape* is about four or five feet high, growing very upright, bearing many flowers of a more globular form than those of any of the other species, and having several simple branches near the base. It has been supposed to be the *angustifolia* of PURSH, but is a much larger plant, and from comparing it with a specimen of the latter communicated by our friend Mr. LAMBERT from his garden at Boyton, seems to be a very distinct species. We have a drawing of this, the true *angustifolia* of PURSH, which we shall take an early opportunity of publishing.

Our drawing of this valuable acquisition to our gardens was taken last July at the Fulham Nursery, Messrs. WHITLEY, BRAME, and MILNE.

N.2223.

Published by S. Curtis, Walworth, April 1. 1822.

Liparia vestita. Concave-leaved-Liparia.

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Class and Order.

Diadelphia Decandria.

Generic Character.

Cal. 5-fidus: lacinia infima elongata. *Cor.* alæ inferius bilobæ. *Staminis* majoris dentes tres breviores. *Legumen* ovatum.

Specific Character and Synonyms.

Liparia *vestita;* floribus capitatis, foliis ovatis concavis subtus lanatis. *Hort. Kew. ed. alt.* 4. *p.* 318. *Willd. Sp. Pl.* 3. *p.* 1115. *Thunb. prodr.* 124. *Persoon Syn.* 2. *p.* 309. *Poir. Encycl. suppl.* 1. *p.* 680. sub Borbonia.
Liparia villosa. *Bot. Repos.* 382.
Genista africana folio cochleariformi, flore luteo. *Seb. Thes.* 1. *p.* 38. *t.* 24. *f.* 1.

Lamarck unites the genus Liparia with Borbonia, and remarks as a circumstance not a little singular, that Linnæus should have joined the genera Polygonum, Fagopyrum, Persicaria and Bistorta into one, and at the same time have divided the genus Genista of the older botanists into several, distinguished by minute characters which hold good only in a few of the species. It may be observed however that the united genus Polygonum does not contain so many species as that of Aspalathus alone, and that however difficult it may be to find efficient characters to distinguish them by, there is so great a difference in habit, as, united to their number, imperiously to demand their separation.

The very remarkable foliage of this shrub gives it a singular and striking appearance, making a pretty variety in the greenhouse, especially while the plant is young and vigorous; for in old plants the stems become in part bare, and many of the leaves turned to a rusty brown colour.

Liparia *vestita* was introduced into this country from the Cape of Good-Hope in the year 1800, by George Hibbert, Esq. and our drawing was taken at his garden three or four years after. Flowers in May and June.

T. Curtis Del. Pub. by S. Curtis, Walworth, Sept. 1, 1810. Tiddeman Sc.

SEDUM CÆRULEUM. BLUE FLOWERED STONECROP.

Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 5-petala. *Squamæ* nectariferæ 5, ad basin germinis. *Caps.* 5.

Specific Character and Synonyms.

SECT. Teretifolia.

SEDUM *cæruleum;* foliis oblongis alternis obtusis basi solutis, cyma bifida glabra. *Vahl. Symb.* 2. *p.* 51. *Willd. Sp. Pl.* 2. *p.* 766. *Persoon Syn.* 1. *p.* 512. *n.* 26. *Bot. Reg* 520.

SEDUM azureum. *Desfont. Atl.* 1. *p.* 362.

DESC. *Stem* branched, decumbent, smooth, spotted. *Leaves* alternate, distant, oblong-ovate, fleshy, convex below and flattish above, spotted; a very small part of the base not adherent to the stem. *Flowers* pale blue, growing sometimes in simple racemes, at others in dichotomous panicles, both terminal and axillary. *Calyx*, in the plant we examined, always seven-cleft, persistent and increasing in the fruit. *Petals* regularly seven. *Stamens* fourteen: seven longer, opposed to the petals, and seven shorter, opposed to the segments of the calyx. *Germens* seven, white, changing to red, acute, incurved. The taste of the plant watery and free from acrimony. Native of the coast of Barbary.

Flowers in August and September. Propagated by cuttings. Communicated by Mr. WILLIAM KENT, from his extensive collection at Clapton.

The 1st figure on the left hand represents a single flower viewed in front. The 2d a petal with one of the longer stamens. The 3d the receptacle and pistils, with a short stamen between each and glands at the base. The 4th the calyx. The 5th below the others, two of the pistils with a short stamen between them. All the figures are somewhat magnified.

N.2225.

Publ. by S. Curtis, Walworth, April 1, 1822.

Weddell Sc.

Aspalathus Chenopoda. Goose-foot Aspalathus.

Class and Order.

Diadelphia Decandria.

Generic Character.

Cal. 5-fidus: lacinia superiore majore. *Legumen* ovatum, muticum, subdispermum.

Specific Character and Synonyms.

Aspalathus *Chenopoda;* foliis fasciculatis subulatis strictis mucronatis hispidis: interioribus brevioribus, floribus capitatis hirsutissimis. *Soland. Mss. apud Banks.*

Aspalathus *Chenopoda;* foliis fasciculatis subulatis mucronatis hirtis, floribus capitatis hirsutissimis. *Sp. Pl.* 1000. *Berg. Cap. p.* 200.

Aspalathus *Chenopoda;* foliis fasciculatis trigonis mucronatis rigidis pilosis, capitulis hirsutis. *Thunb. Prodr.* 126. *Willd. Sp. Pl.* 3. *p.* 954. *Hort. Kew. ed. alt.* 4. *p.* 262.

Chamælarix s. Chenopoda monomopatensis. *Breyn. Cent. p.* 23. *t.* 11?

Genista ericoides africana, flore luteo. *Seb. Thes.* 1. *p.* 39. *t.* 24. *f.* 4.

Frutex Africanus Genistæ aculeatæ foliis recurvis summo capite cæsarie villoso. *Pluk. Amalth.* 101. *t.* 397. *f.* 6.

Nepa capensis capitata foliis rigidis *Ray Append.* 246. *n.* 1. fide Solandri.

A greenhouse shrub; native of the Cape of Good-Hope. *Stem* much branched: *branchlets* short, hairy, terminated with a capitulum of flowers inclosed in an involucrum of hairy linear mucronate leaves, much less rigid than those on the stem; *leaves* subulate, thinly hairy, fasciculate, the outer ones

in

in the bundles much longer than the inner, all armed with a very sharp pungent mucro. *Flowers* large, yellow stained with red; vexillum much larger than the alæ and carina, villous on the outside.

The CHAMÆLARIX of BREYNIUS appears to us to be rather a doubtful synonym. The figure we have quoted from SEBA's Thesaurus is not a bad representation of our present subject, except that the hairy bractes which should surround the capitula, are omitted. But the two figures quoted by BERGIUS, though said by him to be good, certainly do not belong to our plant, but seem to be representations of PHYLICA *plumosa*. LINNÆUS has quoted one of the same figures in the species Plantarum, but that quotation is probably a mere typographical error of 23 instead of 24, repeated by WILLDENOW, PERSOON, and others.

It is a plant of rare occurrence in our collections, though supposed to have been cultivated by PHILIP MILLER in 1759. Communicated to us by Messrs. LODDIGES and SONS last July.

N. 2226.

Pub by S Curtis Walworth April 2 1823

LAVATERA TRILOBA. THREE-LOBED LAVATERA.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. duplex: exterior trifidus. *Caps.* plurimæ, monospermæ.

Specific Character and Synonyms.

LAVATERA *triloba;* caule fruticoso, foliis subcordatis subtrilobis rotundatis crenatis, stipulis cordatis, pedunculis aggregatis unifloris. *Hort. Kew. ed. alt. 4. p.* 219. *Sp. Pl.* 972. *Willd. 3. p.* 794. *Persoon Syn. 2. p.* 250. *n.* 6. *Jacq. Hort. t.* 74. *Kniph. Cent. 7. n.* 41.

LAVATERA *triloba;* foliis subcordatis obsolete trilobis in triangulum plicatis crenatis stipulis cordatis, pedunculis aggregatis unifloris. *Cav. Diss. 2. p.* 37. *t.* 31. *f.* 1.

ALTHÆA fruticans hispanica, aceris monspessulani incanis foliis, grandiflora, saponem spirans. *Pluk. Alm.* 24. *Phyt. t.* 8. *f.* 3.

ALTHÆA frutescens folio rotundiore incano. *Bauh. Pin.* 316.

ALTHÆA frutex. *Clus. Hisp. p.* 90. *ic.* 91. *Lob. Ic.* 654. *f.* 1.

ALTHÆA fruticans hispanica. *Hort. Eyst. Ord. æstiv.* 6. *t.* 4. *f.* 1.

LAVATERA *triloba* was cultivated by PHILIP MILLER in 1759; but seems to have been little known in our gardens of late years. Our friend Mr. LAMBERT met with it in a garden in the country, but could not discover from what source it came there. He describes it as being powerfully musk-scented; which is the more remarkable as we do not find that any author has mentioned the scent, except PLUKENET who compares it to soap; could he mean perfumed soap?

Native of Spain. Flowers in June, July, and August. Communicated by A. B. LAMBERT, Esq. from his garden at Boyton.

J. Curtis Del.

Pub.d by S. Curtis, Walworth, April 1, 1821.

AMARANTHUS SPECIOSUS. SHEWY AMARANTHUS.

Class and Order.

MONŒCIA PENTANDRIA.

Generic Character.

MASC. *Cal.* 3-s. 5-phyllus. *Cor.* 0. *Stam.* 3. s. 5.
FEM. *Cal.* maris. *Cor.* 0. *Styli* 3. *Caps.* 1-locularis, circumscissa. *Sem.* 1.

Specific Character.

AMARANTHUS *speciosus;* pentandrus, caule erecto ramoso, foliis oblongo-ellipticis utrinque acutis longissime petiolatis, racemis terminalibus compositis subverticillatis.

There is certainly considerable affinity between our present subject and AMARANTHUS *sanguineus* of the species Plantarum, and MILLER's figure is not altogether dissimilar to our plant, but WILLDENOW's figure in his Monograph of the genus does not accord with it, neither does the specimen of that species in the Banksian Herbarium.

The *Stem* is erect and much branched; the middle *leaves* oblong-elliptical, red-purple, brightest on the under side, tapering at both ends, on long slender footstalks; *flowers* bright crimson, on compound terminal racemes, and also on lateral axillary simple or less compounded ones: the branchlets are short, and grow two or three together, separated from the rest by a small distance between them, giving the racemes somewhat of a verticillate appearance.

This fine AMARANTHUS was raised in the garden of Sir GEORGE STAUNTON, Bart. at Leigh Park, from Napaul seeds given him by H. I. COLEBROOK, Esq. It appears by an account transmitted by Sir GEORGE's gardener, Mr. GEORGE HALL,

Hall, that the *Amaranthus speciosus* requires a considerable degree of artificial heat to bring it to perfection. He sows the seeds in March, in peat and vegetable mould, in a hot-bed; when they have been up a few days he transplants them into separate small pots, and places them in the frame again. In two or three weeks they require shifting into larger pots; and when become strong plants he removes them into the hot-house, shifting them into larger pots, as they advance in size, where he suffers them to remain till they come to their full beauty, when they may be removed to the green-house or conservatory. Upon first removing them to a colder situation they sometimes flag so much as to make it necessary to return them to the stove for a few days, when they will recover their pristine vigour and may be again removed to a colder atmosphere, in which they will continue in beauty two or three months. Indeed Mr. Hall observes that a plant that he grew last year still retains its life and beauty: (March 12.)

If this species be a native of Napaul, it seems remarkable to us that so much artificial heat should be necessary to bring it to perfection.

N.2228.

Pub.by S. Curtis. Walworth. Sept.1st 1801.

W.Hazell Sc

FALKIA REPENS. CREEPING FALKIA.

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Class and Order.

PENTANDRIA DIGYNIA. (HEXANDRIA *Willd.*)

Generic Character.

Cal. 1-phyllus. *Cor.* 1-petala. *Styli* 2. *Sem.* 4. *Lin. Suppl. p.* 31.

Specific Name and Synonyms.

FALKIA repens. *Hort. Kew. ed. alt.* 2. *p.* 317. *Willd. Sp. Pl.* 2. *p.* 249. *Thunb. Diss. nov. gen.* 1. *p.* 17. *Lin. Suppl. p.* 211. *Persoon Syn.* 1. *p.* 287. *Bot. Repos.*

CONVOLVULUS *Falckia;* foliis cordatis excisis, caule sarmentoso. *Thunb. Prodr.* 35. Convolvulus *Falkia* Jacquini, est longe alia planta.

DESCR. *Root* creeping, perennial. *Leaves* in bundles, on long filiform petioles, fleshy, cordate, quite entire; lower petioles in particular very long. *Peduncles* erect, growing from between the leaves, rather longer than the petioles. *Calyx* tubular, five-angled, with a five-cleft margin, persistent. *Corolla* bell-shaped, margin five-lobed: lobes revolute, emarginate. *Stamens* generally five, rarely six, inserted into the receptacle. *Germens* according to BROWN four, pubescent, connected by pairs at the base through the medium of the styles. *Styles* two, divaricate: *Stigmas* globular.

This plant in habit and corolla is exactly a CONVOLVULUS but differs in the fruit. It belongs however to the natural order of *convolvulaceæ,* of which Mr. BROWN has made a second section, having two or four unilocular ovaria instead of a single one, in his Prodromus of the plants of New Holland, an inestimable work, the continuation of which is so ardently wished for by all botanists. This section contains DICHONDRA of FORSTER, distinguished from FALKIA especially by having two, two-seeded ovaria.

Our

Our drawing was taken at Mr. Hibbert's late collection at Clapham Common, and the description from a plant communicated by Mr. Joseph Knight of the Exotic nursery, King's Road, Little Chelsea.

N.2229.

J. Curtis, Del.

Pub. by J. Curtis, Walworth, April 2, 1810.

Wilkinson.

RANUNCULUS PEDATUS. CUT-LEAVED CROW-FOOT.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5, intra ungues poro mellifero. *Sem.* nuda.

Specific Character and Synonyms.

RANUNCULUS *pedatus;* foliis radicalibus digitato-partitis pedatisque : lobis linearibus subentegerrimis caulinis sessilibus tripartitis, caule erecto paucifloro.

RANUNCULUS *pedatus;* foliis glabris, radicalibus petiolatis tripartitis pedatisve, lobis linearibus integris bifidisve, caulinis sessilibus partitis, summis linearibus, caule erecto paucifloro, calyce adpresso. *Decand. Regn. Veget. p.* 258.

RANUNCULUS *pedatus;* foliis radicalibus ternato-pedatis, rameis ternatis, foliolis linearibus integerrimis. *Waldst. et Kitaib. Hungar.* 2. *p.* 112. *t.* 108.

RANUNCULUS pedatifidus. *Smith in Rees Cycl.? Decand. Regn. Veget.* 1. *p.* 258?

Entertaining great doubts whether the RANUNCULUS *pedatifidus* of SMITH and *pedatus* of WALDSTEIN and KITAIBEL ought to be considered as distinct species, although recorded as such by DE CANDOLLE, we transmitted the engraving of our plant to our friend Sir JAMES E. SMITH, who kindly compared it with his specimens, and informs us, that it appears to be a representation of his *pinnatifidus*, except in the deeper division and smaller number of lobes of the radical leaves and the want of the soft hairs on the stem, circumstances evidently liable to great variation. That these plants both belong to the

the same species is rendered the more probable, from the Hungarian *pedatus* being found likewise on the authority of Dr. Fischer, in the neighbourhood of the Volga. According to De Candolle the stem of Ranunculus *pedatus* is sometimes pubescent, sometimes smooth, and sometimes smooth at the lower part and pubescent at the upper.

A hardy perennial of little beauty. Flowers in April. Communicated by Mr. Joseph Knight of the Exotic Nursery.

N.2230.

Pub. by J. Curtis, Walworth, April 1, 1822.

Waddell sc.

EUGENIA MYRTIFOLIA. MYRTLE-LEAVED EUGENIA.

Class and Order.

ICOSANDRIA MONOGYNIA.

Generic Character.

Cal. 4-partitus, superus. *Petala* 4. *Bacca* 1-locularis, 1-sperma.

Specific Character.

EUGENIA *myrtifolia;* foliis ellipticis, pedunculis trichotomis lateralibus terminalibusque, staminibus petalis multo longioribus, calycibus quadrifidis.

DESCR. An ever green shrub with flexile square branches, the angles of which are slightly winged. *Leaves* opposite, elliptical, not acuminate, smooth, shining, very like those of the common broad-leaved Myrtle. *Flowers* white, in terminal and lateral trichotomous corymbs. *Calyx* superior, persistent, four-toothed: teeth spreading, red. *Petals* 4, alternating with the teeth of the calyx, deciduous, white, a little larger than the calyx. *Stamens* very many, inserted into a fleshy, undulated ring. *Germen* inferior, top-shaped. *Style* red, persistent, a little shorter than the stamens. *Stigma* simple or slightly clubbed. Fruit not seen.

The taste of the leaves acid and aromatic, of the flowers sweet and gratefully acid.

This species is decidedly different from EUGENIA *elliptica* No. 1872 of this work, the flowers are much larger with very long deciduous stamens, but do not grow in such long terminal panicles; calyx spreading with a four-cleft limb; *leaves* smaller, not acuminate, and the parallel veins on the under surface much less distinct.

Native of New Holland. Introduced by Messrs. LODDIGES and SONS; and cultivated by them in the conservatory, where it thrives luxuriantly. Propagated by cuttings. Communicated to us in September 1820.

Pub. by S Curtis, Walworth, Kingsland.

Crinum Declinatum. Sloping-flowered Crinum.

Class and Order.

Hexandria Monogynia.

Generic Character.

Vide supra, No. 2217.

Specific Character.

Crinum *declinatum;* bulbo oblongo, foliis suberecto-recurvis acutis undulatis margine lævibus, scapo multifloro, corollæ laciniis loratis, germinibus pedunculatis assurgenter curvatis.

Desc. *Bulb* green, columnar, about 7 inches long: *leaves* somewhat erect with the point acute and hanging down, undulated, smooth edged, $4\frac{1}{2}$ inches wide. *Spathe* 4 inches or more; *Umbel* about 24-flowered. *Flowers* sweet, successive, nodding before their expansion: *tube* green, 3 inches long: *laciniæ* bent back, channelled, $\frac{1}{4}$ of an inch wide, $4\frac{3}{8}$ inches long, stained with red on the outside towards the end, especially in the buds, the three exterior ending in a claw, the three inner notched at the point; *filaments* wide spread and bent upwards, deep red the upper half of their length, the three outer $\frac{1}{2}$ an inch, the three inner $\frac{1}{4}$ of an inch longer than the style: *anthers* long with orange pollen; *style* red; *stigma* a red triangular point; *germen* and *peduncle* each near an inch long, horizontal, curved upwards, green speckled with red; *cells* one-seeded: *Ovule* oblong-oval.

Some bulbs of this unrecorded species of Crinum, which I believe were received by Dr. Carey from Silhet, were sent two or three years ago from Calcutta under the mistaken name of *sumatranum*, which is a very different species with rigid and rough-edged leaves, and a sessile or sub-sessile germen.

Specierum

Specierum Enumerationi Addenda.

Crinum brachyandrum *supra* 2121, *p.* 8. is a very distinct species. *Column* 5 inches high, whitish; *leaves* about 20, rather erect, from 3 to near 5 feet long, and scarcely $2\frac{1}{4}$ inches wide, dark green, with smooth margins, obtusely acuminate like those of C. defixum: *Scape* green, above 2 feet long; *flowers* about eleven, of which seven expand at the same moment, the buds having nodded in a circle round the scape, and the rest before the first wither; *germen* subsessile; *tube* green, $2\frac{3}{4}$ inches long; *laciniæ* $3\frac{1}{2}$ inches long, and $\frac{3}{8}$ wide, white; *filaments* just tipped with pale purple scarcely an inch longer than the tube, all bent upwards; *style* an inch longer than the filaments, declined, above an inch thereof pale purple; *stigma* small, triangular, white; *germen* sessile: *cells* 2-seeded. Raised by seed from Sidney in New Holland.

Crinum procerum. A native of the Birman empire. It is asserted and appears to be quite distinct from C. *toxicarium,* and is said to exceed C. *amabile* in stature. *Flowers* white, tinged with red, as those of *sinicum* are with yellow.

Crinum declinatum. *Supra No.* 2231.

Crinum macrocarpon. *Carey Mss.* Native of the country near Ranjoor. *Leaves* narrow, very long and stiff. *Flowers* pure white: *laciniæ* broader than those of *toxicarium. Seed* two inches in diameter.

Crinum toxicarium; of which there are two varieties in this country differing chiefly in foliage, is the *asiaticum* of the Botanical Magazine, No. 1073.

W. H.

N.2232.

W. Herbert Del.

Pub. by S. Curtis. Walworth. May. 22 1822.

Weddell. sc

DOLICHOS SINENSIS. CHINESE DOLICHOS.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Vexilli basis callis 2, parallelis, oblongis, alas subtus comprimentibus.

Specific Character and Synonyms.

DOLICHOS *sinensis;* volubilis, leguminibus pendulis cylindricis torulosis, pedunculis erectis multifloris. *Amoen. Acad. 4. p. 326. Sp. Pl.* 1018. *Willd. 3. p.* 1038. *Hort. Kew. ed. alt. 4. p. 292. Jacq. Hort. Vindob. 3. p. 39. t.* 71.

DOLICHOS sinensis. *Rumph. Amb. 5. p.* 375. *t.* 134.

DESCR. *Stem* voluble, roundish, striate, smooth. *Stipules* ovate acuminate, lengthened at the base beyond the point of insertion, which gives the appearance of their being spurred. *Leaves* ternate: *leaflets* rhomb-shaped, smooth on both sides, veined. Petioles $1\frac{1}{2}$ long, smooth: *partial petioles* short, pubescent. *Peduncles* axillary, shorter than the petioles, but by being often continued beyond the head of flowers these become sessile. *Legume* linear, sigmoid about 5 inches long, marked with the impression of the seeds. *Seeds* when ripe of a red purple, about twenty, separated by membranaceous septa.

Drawing and specimen of the plant communicated by the Reverend and Honourable WILLIAM HERBERT of Spofforth; who raised it from seeds received from the Cape of Good-Hope under the name of the Caffre Bean. He received seeds of the same likewise from Mr. BURCHALL, who informed him that the plant was cultivated by the Caffres: it is however undoubtedly the same species as the specimen of Dolichos *sinensis* in the Banksian

Banksian Herbarium; nor do we see any reason to think it different from Rumf's and Jacquin's plants above referred to, and which is cultivated in many parts of the East, varying with red and white seeds. We understand from Mr. Herbert, that when sown in the open ground in Mr. Burchall's garden at Fulham it did not clime, but in the stove at Spofforth, though it remained upright till it was six or eight inches high, it then began to grow rapidly, twining to the height of eight or nine feet, and produced perfect seeds; but in the open ground it produced a few flowers only, and no seeds.

N.2233.

Pub. by S. Curtis. Walworth. May. 1 1821.

Weddell. Sc.

ASPALATHUS CILIARIS. CILIATED ASPALATHUS.

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Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 5-fidus: lacinia superiore majore. *Legumen* ovatum, muticum, subdispermum.

Specific Character and Synonyms.

ASPALATHUS ciliaris; foliis ternatis fasciculatisque trigonis acutis ciliatis, capitulis terminalibus, calycibus flores æquantibus.

ASPALATHUS *ciliaris;* foliis fasciculatis scabris subpilosis, capitulis terminalibus. *Thunb. Prodr.* 127. *Willd. Sp. Pl.* 3. *p.* 958. *Hort. Kew. ed. alt.* 4. *p.* 263.

ASPALATHUS *ciliaris;* foliis fasciculatis filiformibus scabris, floribus terminalibus sessilibus, vexillis pubescentibus. *Lin. Mant.* 262.

The genus ASPALATHUS is very extensive, and very few of the species have been as yet satisfactorily settled, the very short specific phrases in Professor THUNBERG's Prodromus being quite insufficient to determine them by; and the larger work of which this was supposed to be the harbinger, after having been expected for twenty years, must now we fear be quite despaired of.

Our figure was drawn by the late Mr. SYDENHAM EDWARDS from a plant communicated by Messrs. LODDIGES and SONS, under the name of ASPALATHUS *ciliaris,* and is therefore the same as the species so designated in the Hortus Kewensis, where it is said to have been introduced by them. We are sorry to find that both this species and A. *chenopoda* published in our last number have now entirely perished. By an oversight we omitted to add as a synonym of the last mentioned species, *Lodd. Bot. Cabinet.* No. 316.

Pub.by S. Curtis, Walworth. May 1.1824.

PELARGONIUM DIOICUM. DIŒCIOUS BLACK-FLOWERED STORKS-BILL.

Planta femina.

Class and Order.

MONADELPHIA PENTANDRIA.

Generic Character.

Cal 5-partitus: lacinia suprema desinente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. *Cor.* 5-petala, irregularis. *Filamenta* 10, inæqualia, quorum 3—6 castrata. *Arilli* 5, monospermi, aristati, ad basin receptaculi rostrati: aristis spiralibus introrsum barbatis.

Specific Character and Synonyms.

Sect. I. Acaulia, radice rapacea.

PELARGONIUM *dioicum;* umbella composita, foliis simplicibus ternatisve hispidis, floribus dioicis, petalis concoloribus. *Hort. Kew. ed. alt.* 4. *p.* 162.

GERANIUM foliis lobatis integrisque hispidis obtusis, calycibus monophyllis, laciniis linearibus, floribus nigricantibus dioicis, radice tuberosa. *Bot. Repos.* 209.

PELARGONIUM *dioicum* comes very near to the *melanan-thon* of JACQUIN; and having been figured as such by Mr. ANDREWS, is generally known by that name in our nurseries; but the radical leaves are for the most part quite entire, or only three-lobed, which in the latter are pinnate, with the pinnæ again divided; it is also described by JACQUIN as having five fertile stamens, whereas our plant is constantly dioecious, bearing

bearing the male and female flowers on distinct plants. It is observed in the Botanists Repository, that this plant increases by tubers produced at a distance from the original root, with which they are only connected by slender fibres.

Native of the Cape of Good-Hope. Requires the protection of a good greenhouse, and flowers best in the heat of the stove. Blossoms in June and July.

Our drawing was taken from a female plant, communicated in May 1819, by Mr. Joseph Knight, of the exotic nursery, King's Road.

N2235

MELASTOMA OSBECKIOIDES. OSBECKIA-LIKE MELASTOMA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, campanulatus. *Petala* 5, calyci inserta. *Bacca* 5-locularis, calyce obvoluta.

Specific Character.

MELASTOMA *osbeckioides;* foliis oblongo-ellipticis trinerviis margine nervisque ciliatis, floribus terminalibus aggregatis calycibus apice setosis.

DESC. *Stem* shrubby, upright, covered with a furrowed bark: *branches*, short, square, hispid. *Leaves* opposite, oblong-elliptical, on short footstalks, three-nerved, nerves and margin ciliated, pale underneath. *Flowers* terminal, rose-coloured, three or four together, on short smooth peduncles. *Calyx* cup-shaped with a five-toothed border, and a scale-like appendix between the teeth: *teeth* acuminate, terminated with a bifid or trifid bristle. *Corolla* five-petaled: *petals* obovate, clawed, three-nerved. *Stamens* ten, on short *filaments* inserted into the margin of the calyx: *anthers* curved, reflected into the cavity of the calyx and finally opening at the apex to discharge the pollen. *Germen* nearly globular, bristly at the point, five-celled: *ovula* many, attached to a central receptacle.

This plant belongs to the natural order of *Melastomaceæ*, and in several respects approaches nearer to the genus OSBECKIA than that of MELASTOMA, but being decandrous, we think

think it better to retain it with the latter genus, at least till the whole shall undergo a reform; for, as Mr. Brown has remarked, "the generic divisions of the whole order remain to be established".

Our drawing was made from a plant communicated by William Kent, Esq. of Clapton, who received it from Robert Barclay, Esq. Bury Hill, by whom it was introduced from the Mauritius. Cultivated in the stove. Propagated by cuttings. Flowers in September and October.

N.2236.

J. Curtis. Del.

Pubby. S. Curtis. Walworth. May. 1. 1821.

Weddell Sc

YUCCA ANGUSTIFOLIA. NARROW-LEAVED ADAM'S-NEEDLE.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata, patens. *Stylus* nullus. *Capsula* trilocularis.

Specific Character and Synonyms.

YUCCA *angustifolia;* acaulis, foliis glaucis, longo-linearibus mucronatis margine filamentosis, capsulis oblongo-obovatis, scapo simplici.

YUCCA *angustifolia;* acaulis; foliis longo-linearibus rigidis margine raro filamentosis, capsulis magnis obovato-cylindraceis. *Pursh. Flor. Amer. Sept.* 1. *p.* 227.

YUCCA angustifolia. *Nuttall Gen. Pl. amer.* 1. *p.* 218.

The present plant is the true YUCCA *angustifolia* of PURSH, and different from the one which has been usually so called in our collections, and which we have already published under the name of *stricta* (No. 2222). The scape of *angustifolia* is simple; the leaves are still narrower recurved, and the threads on their margins very much longer; the laciniæ of the corolla more acute; and it is altogether of humbler growth. PURSH described his plant from NUTTALL's herbarium; and our plant was raised from seeds brought over by Mr. NUTTALL, and presented to our friend AYLMER BOURKE LAMBERT, Esq. in whose garden at Boyton it flowered in July 1820. Our specific character is chiefly a version of that given by NUTTALL in his work above referred to, which, though small in bulk, is weighty in valuable matter.

J. Curtis Del. Pub. by S. Curtis, Walworth, June 1st 1820. Weddell. Sc.

THALICTRUM ALPINUM. ALPINE MEADOW-RUE.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. *Petala* 4. s. 5. *Sem.* ecaudata.

Specific Character and Synonyms.

THALICTRUM *alpinum;* caule simplicissimo subnudo, racemo simplici terminali. *Spec. Pl.* 767. *Willd.* 2. *p.* 1295. *Hort. Kew. ed. alt.* 3. *p.* 346. *Sm. Fl. Brit.* 2. *p.* 584. *Engl. Bot.* 262. *Lightf. Fl. Scot.* 286. *t.* 13. *f.* 1.

THALICTRUM *alpinum;* caule simplicissimo subnudo digitali, racemo simplici terminali, floribus nutantibus, foliorum segmentis glabris. *De Cand. Regn. Veget.* 1. *p.* 175. *Flor. Franç.* 4. *p.* 874.

THALICTRUM minimum præcox foliis splendentibus. *Moris. Hist.* 3. *p.* 325. *sect.* 9. *t.* 20. *f.* 14. *fig. pessima.*

THALICTRUM minimum montanum atrorubens foliis splendentibus. *Raj. Syn.* 204. *Boerh. Ind. alt.* 1. *p.* 44. *t.* 1.

An elegant little alpine plant; native of the mountains of Kamschatka, Newfoundland, Lapland, Greenland, Iceland, and the Pyrenees; and also of Scotland and Wales. The only tolerably good representation of this scarce plant hitherto published is that in English Botany; and even this has been apparently drawn from an imperfect specimen, as it does not express correctly its habit; the flowers being naturally cernuous, and the filaments too slender to support the anthers in an erect position.

The number of stamens and of pistils differs in the same individual; the former from eight to twelve, the latter from two to six.

A hardy

A hardy perennial. Communicated by Mr. KNIGHT of the Exotic Nursery, King's Road, in April 1820.

The outline figures represent first the four petals or calyx of JUSSIEU, the 2d the stamens, and the 3d the four pistils, surmounted by the divaricate anthers, all magnified.

Pub.by S. Curtis Walworth Terrace.

Lobelia Kalmii. Kalm's Lobelia.

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Class and Order.

Pentandria Monogynia.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala, irregularis. *Antheræ* cohærentes. *Caps.* infera, 2-s. 3-locularis.

Specific Character and Synonyms.

Lobelia *Kalmii;* tenuis, erecta, simpliciuscula, foliis radicalibus spathulatis, caulinis linearibus tenuissime denticulatis, floribus racemosis alternis remotis pedicellatis. *Pursh Fl. amer. sept.* 446.

Lobelia *Kalmii,* caule erecto, foliis lanceolato-linearibus obtusiusculis alternis integerrimis, racemo terminali. *Sp. Pl.* 1318. *Walt. Carol. p.* 218. *Willd. Sp. Pl.* 1. 939.

Lobelia Kalmii. *Michaux Fl. amer. bor.* 2. *p.* 153. *Nuttall Gen. Pl. amer. sept.* 2. *p.* 76.

Rapuntium canadense pumilum, linariæ folio. *Tournef. Inst.* 164.

Descr. " *Stem* a foot and half high, angled, smooth. *Radical leaves* indistinctly crenate, hairy on both sides: *Cauline* alternate, bluntish, smaller towards the upper part of the stem, smooth on both sides with minute yellow teeth. *Peduncles* hairy, one-flowered, arising from the axillæ of the upper leaves, having two little bracteæ above their middle."

For the drawing and description of this plant, of which we believe a figure is now for the first time published, we are indebted to Dr. Robert Graham, Professor of Botany in the university of Edinburgh. It flowered in the Royal Botanic garden there in August 1820.

It is marked as an annual in the species Plantarum of Linnæus and Willdenow; but this is probably a mistake

as

as the Professor says, in his letter, that the *roots* were sent by Mr. Blair from Canada at the end of 1819, together with those of Calypso *americana*, Arethusa *bulbosa*, and Calopogon *pulchellus* (Limodorum *tuberosum*, *Bot. Mag.* 116); all of which flowered the following year.

Nuttall describes the bractes as being at the summit of the peduncle; that they were nearer the middle in our plant might perhaps be occasioned by its having been flowered under a frame. The same author remarks that he has scarcely ever seen any plant, the flower apart, which so imposingly resembled Campanula *rotundifolia*. We have often been struck by a similar resemblance in habit between other species of these two genera.

Native of Canada and New York in North America, and therefore no doubt perfectly hardy. Not recorded in the Catalogue of the Kew garden and probably now first introduced into Great-Britain.

N.2239.

Pub. by S. Curtis Walworth. January 1821.

Weddell. Sc

Iris Pseud-Acorus, β. pallido-flava.
Pale-Yellow Water Iris.

Class and Order.

Triandria Monogynia.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

Iris *Pseud-Acorus;* imberbis, radice crassa solida horizontali, foliis ensiformibus, petalis alternis stigmate minoribus. *Hort. Kew. ed. alt.* 1. *p.* 115. *Willd. Sp. Pl.* 1. *p.* 232. *Curtis Flor. Lond. English Botany* 578. *Redouté Liliac.* 235.

(β.) pallido-flava; *floribus pallido-luteis, foliis apice magis elongatis.*

There does not seem to be sufficient difference between this plant and our common Iris *Pseud-Acorus* to constitute a distinct species, yet there is something that pervades the whole aspect not quite agreeing with our native species; nor does it require so wet a soil.

It is said to have been imported from Carolina by the late Mr. Lyons; yet we do not find it recorded as an American species either by Michaux, Pursh, or Nuttall.

I. Pseudacorus, acuminata, foliis Baker.

N.2240.

Published by S. Curtis, Walworth June 1st 1822.

Weddell. Sc

Crocus vernus, γ. obovatus. Largest Purple Spring Crocus.

Class and Order.

Triandria Monogynia.

Generic Character.

Spatha plerumque 2-valvis: valvula interior multo angustior. *Cor.* infundibuliformis: *Tubus* longissimus, basi subterraneus: *Limbus* 6-partitus, regularis. *Stigmata* 3.

Specific Character and Synonyms.

Crocus *vernus;* corollæ fauce pilis glandulosis clausa. *Hort. Kew. ed. alt.* 1. *p.* 80. *Bot. Mag.* 860. ubi synonyma petenda.

(α.) communis; *laciniis erectis conniventibus ovato-lanceolatis.*

Crocus vernus. *English Bot.* 344. *Redouté Liliac* 266.

(β.) neapolitanus; *laciniis ovatis, stigmatibus antheras superantibus.*

Crocus *vernus,* β. neapolitanus. *Bot. Mag.* 860.

(γ.) obovatus; *laciniis obovatis obtusissimis crenulatis, antheris stigmata superantibus.*

Crocus *obovatus;* piliger, laciniis rotundato-obovatis inflato-incurvis lateribus alte imbricatis, stigmatibus latissimis. *Haworth in Trans. Horticult. Soc.* 1. *p.* 133.

Mr. Haworth, who communicated the plant from which our drawing was taken, considers it as a species distinct from *vernus,* of which Mr. Ker, to whose authority we are inclined to submit, makes it only a variety. But as the latter botanist has inserted the length of the stigmas extending beyond the anthers, as a character of *vernus,* the anthers in our plant exceeding the stigmas in length might be regarded as establishing a sufficient specific distinction, provided this character should be found to be constant, which however we very much doubt.

Whether

Whether the Crocus which Clusius received from Naples belonged to our plant, to β, or to a variety of *bicolor*, as is suspected by Dr. Goldbach, the author of a monograph on this genus, cannot now be possibly ascertained.

Mr. Haworth says that his Crocus *obovatus* varies with white, variegated, purple, and brilliant dark-purple flowers: of which varieties our drawing represents the latter.

Flowers early in April.

N.2241

MELASTOMA SANGUINEA. RED-VEINED MELASTOMA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, campanulatus. *Petala* 5. (nunc 6. vel 4.) calyce inserta. *Bacca* 5-locularis, calyce obvoluta.

Specific Character.

MELASTOMA *sanguinea*; dodecandra, foliis ovato-lanceolatis quinque nerviis, pedunculis terminalibus solitariis uniforis, germinibus globosis hispidissimis.

DESC. *Stem* shrubby, extremely hispid with strong bristles of a dull red colour, branched crosswise. *Petioles* hairy, red, horizontal, united by a stipulaceous membrane: *leaves* ovate-lanceolate, sometimes cordate, five-nerved, shining on the upper surface and covered with rough points, margin scabrous, under surface scabrous, pale, with nerves and transverse parallel veins of a bright red colour while young; the lower leaves are eight inches long and five and a half wide: upper ones narrower. *Flowers* large, rose-coloured, terminal, solitary. *Germen* globular, covered with strong incurved and tangled bristles. *Calyx*, superior, six-cleft: *segments* lanceolate with six very small intermediate segments. *Petals* six, obcordate, concave, fleshy, crisped, having an acidulous taste. *Stamens* twelve, six longer and six interior shorter: antheriferous portion of the *filament* incurved, and terminated at the base with two yellow spurlike appendages. *Style* declined, shorter than the stamens. *Stigma* truncate.

The red colour of the pubescence and of the petioles, and more especially of the nerves and veins on the under surface of

of the leaves, has given occasion to the name we have applied to it; but it is most conspicuous in the latter whilst young, disappearing in great measure in a more advanced age.

There is a near affinity between our plant and MELASTOMA *malabathrica* (supra No. 529) likewise an East-Indian species; but they may be at once distinguished by the number of petals and stamens, unless it should be found that this character is subject to variation.

Among the undescribed species of MELASTOMA in the Banksian Herbarium we find one which appears to be the same as our plant, brought from the straits of Sunda by Sir GEORGE TAUNTON, and another not quite so certain from Macao by Mr. DAVID NELSON. The one from which our drawing and description were taken, was raised from seed received from China, by Mr. BROOKE of the Northampton Nursery, Newington-Green, by whom it was communicated in October last year. Cultivated in the stove, where it forms a very handsome free growing shrub.

N.2242.

DENDROBIUM CUCULLATUM. HOODED DENDROBIUM.

Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Labellum ecalcaratum, articulatum cum apice processus unguiformis, cujus lateribus petala antica adnata calcar æmulantia. *Massæ pollinis* 4, parallelæ: BROWN *in Hort. Kew.* 5. *p.* 212.

Specific Character.

DENDROBIUM *cucullatum;* caulibus pendulis, foliis bifariis lanceolatis acuminatis, pedunculis oppositifoliis subbifloris, labello indiviso circumscriptione ovato basi cucullato. *Brown Mss.*

Our drawing was taken from a plant which flowered in the hot-house at Spring-Grove, the seat of Lady BANKS, in March last. We had not an opportunity of seeing the plant ourselves, and are entirely indebted to the friendly assistance of Mr. ROBERT BROWN for any intelligence we can give about it. It is a Native of the East Indies, and was sent to this country by the late Dr. ROXBURGH; among whose unpublished drawings is the figure of at least a very nearly related species which he calls DENDROBIUM *Pierardi,* having been sent, by Mons. PIERARD, to the Calcutta garden from Chittagong, where and of various parts of the Delta of the Ganges it is a native. There is however too much difference between our plant and Dr. ROXBURGH's figure to justify their being considered as the same species. In his drawing the flowering stems are entirely without leaves, the colour of the flower is a pale yellow, the lip large and shovel shaped; being dilated at the upper extremity into a flattish obovate form, slightly curled at the margin

margin and somewhat ciliate; incurved at the base into a tube concealing the column of fructification. In our plant the base is incurved in the same manner, but the incurvation is continued in some degree to the extremity, and the whole labellum is much shorter. The stems of our plant are most probably pendulous in their natural state, though trained under cultivation in an upright direction; it is not unlikely too that in an older plant the flowering stems may be entirely destitute of leaves which was the case towards the extremity, as shown in our figure; but the different form of the labellum, to say nothing of the colour of the flower, will, we imagine, always keep them distinct.

N.2293.

T. Curtis Del

Pub. by S. Curtis, Walworth, Jones 1824

Wood sc.

CLAYTONIA SIBIRICA. SIBERIAN CLAYTONIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 2-valvis. *Cor.* 5-petala. *Stigma* 3-fidum. *Caps.* 3-valvis, 1-locularis, 3-sperma.

Specific Character and Synonyms.

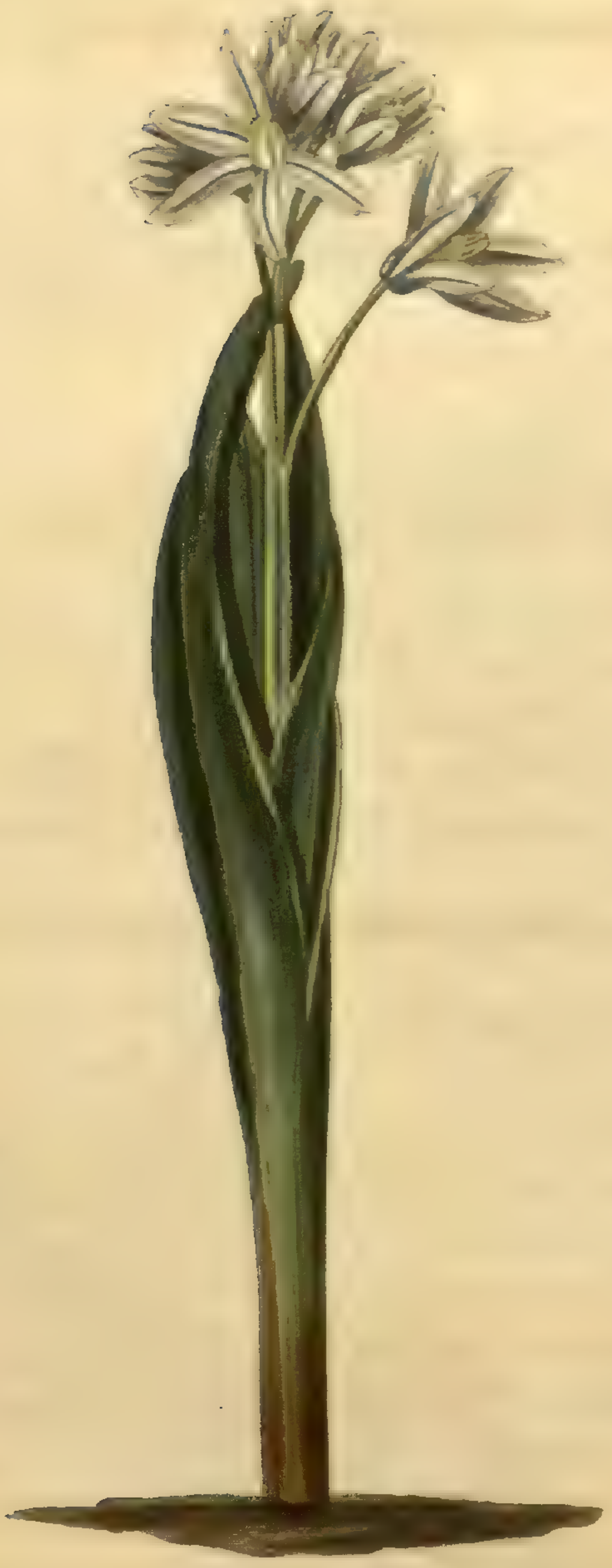
CLAYTONIA *sibirica;* foliis nervosis: radicalibus caulinisque ovatis, racemo secundo. *Willd. Sp. Pl.* 1. *p.* 1186. *Hort. Kew. ed. alt.* 2. *p.* 53.
CLAYTONIA *sibirica;* foliis ovatis. *Spec. Pl.* 294.
LIMNIA. *Lin. in Act. Stock.* 1746. *p.* 130. *t.* 5.

CLAYTONIA *sibirica* has a very near affinity with *Alsinoides* (supra No. 1309) but differs in having its leaves nerved and paler underneath, stem more simple; in the colour and shape of the petals, which are more obtuse and terminate in a slender claw.

Mr. SALISBURY in his account of CLAYTONIA *spatulæfolia* (Paradisus Londinensis 77) has suggested that the Siberian species must perhaps be restored to their former title of *Limnia,* as differing in habit and in having only three seeds in the pericarpium, which bursts with elasticity; but *virginica* and *perfoliata,* both natives of America, have for the most part only three seeds, and the capsules of the latter certainly burst with elasticity. Notwithstanding the criticism of the same learned botanist, we must maintain that our drawing of the petals of *virginica* is correct, as applied to the plant from which it was taken, and confirmed by a living specimen which we have since examined.

CLAYTONIA *sibirica* is a hardy annual. Native of Siberia. Propagates readily by seed. Flowers most part of the summer. Communicated by Mr. KNIGHT of the Exotic Nursery in May 1820.

N. 2244.



PUSCHKINIA SCILLOIDES. SQUIL-LIKE PUSCHKINIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 1-petala, 6-partita, infera. *Nectarium* brevissimum, 6-dentatum, coronans faucem. *Stamina* intra nectarium. *Marschall & Bieb.*

Specific Character and Synonyms.

PUSCHKINIA scilloides. *Adam in Nov. act. Petrop. Marsch. Cent.* 2. *t.* 91.
PUSCHKINIA *scilloides;* foliis radicalibus geminis. *Fl. Taur. Cauc.* 1. *p.* 277. *et.* 3. *p.* 266.
ADAMSIA scilloides. *Willd. Enum. suppl. p.* 16.

DESCR. Stature and habit of SCILLA *amœna*. *Leaves* radical, two or three, lanceolate, striate, concave, sheathing, erect. *Scape* very little longer than the leaves, bearing a terminal corymb of about six flowers, white, streaked and tinged with a delicate blue: *footstalks* unequal, lower ones much the longest. *Corolla* six-parted: *laciniæ* patent, lanceolate. *Nectarium* half the length of the laciniæ, tubular, divided half way into six connivent laciniæ, unequally toothed at the point. *Anthers* yellow, bilocular, on very short *filaments* attached to the upper part of the tube of the nectary. *Germen* superior, oval, marked with six longitudinal lines, three-celled, with many globular, shining ovules. *Style* somewhat longer than the tube of the nectary: *stigma* obtuse, lobular.

This plant differs from SCILLA and ORNITHOGALUM by the nectarium or corona, which perhaps may be considered as formed by the union of six broad filaments, the free part extending

tending beyond the insertion of the anthers, and in being toothed, shewing some affinity with several species of Allium.

This plant was named in honour of the late Count Apollos Mussin Puschkin by Dr. Adams, and was first recorded in the Flora Taurico-Caucasica by M. Marschall v. Bieberstein. A hardy perennial. Communicated by Mr. William Anderson of the Chelsea Garden in March last.

Pub. by S. Curtis. Walworth. July. 1. 1822.

VANDA ROXBURGHII. CHEQUER-FLOWERED VANDA.

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Class and Order.

GYNANDRIA MONANDRIA.

Generic Character.

Labellum calcaratum, cum basi simplici (breviusque producta) *columnæ* apteræ continuum, trifidum, lobo medio carnoso. *Petala* patentia, distincta. *Massæ pollinis* 2, obliquè bilobæ. BROWN *in Bot. Reg. n.* 506. Intrat *orchidearum* sectionem IV^am. ejusdem authoris, in Horti Kewensi editione altera *v.* 5, *p.* 205, propositam, quibus *anthera* terminalis, mobilis, decidua; *massæ pollinis* demum cereaceæ.

Specific Character and Synonyms.

VANDA *Roxburghii;* ovariis contortis, petalis oblongo-ovatis undatis, foliis oblique tridentatis. *Brown in Bot. Reg. n.* 506.

CYMBIDIUM tesselloides. *Roxb. ic. inedit.*

VANDA. *Sir William Jones in Asiat. Res.* 4. *p.* 302.

This beautiful parasitic plant is a native of Bengal, where it grows more especially, but not exclusively, on the Mango-Tree. In common with many other parasitical plants of tropical countries it puts forth long root-like tendrils, by which it attaches itself strongly to the trunk or branch; but these organs probably do not perform the office of roots, or that of drawing nourishment from the juices of the supporting tree; for this plant, like many others, appears to be, as Sir WILLIAM JONES observes, a true air-plant, and will live and thrive in a pot without earth or water.

Sir WILLIAM JONES refers to EPIDENDRUM *retusum* of LINNÆUS as a synonym of this plant, but it is certainly very distinct

distinct from the Anfieli Maravara of Rheede, quoted as a synonym by this author.

Our drawing was taken from a plant, which flowered in November 1820 at Spring-Grove, the seat of Lady Banks, being suspended from the top of the stove in a basket with moss.

Pub.by S. Curtis. Watworth. July. 1.1802.

HAKEA NITIDA. SHINING-LEAVED HAKEA.

Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Cor. 4-petala, irregularis. *Antheræ* apicibus concavis corollæ immersæ. *Glandula* hypogyna, dimidiata, (raro biloba.) *Folliculus* superus, ligneus, 1-locularis: loculo excentrico. *Seminum* ala apicis longior nucleo.

Specific Character and Synonyms.

HAKEA *nitida;* foliis lanceolatis oblongisve basi attenuatis spinuloso-paucidentatis integrisque nitidis subvenosis ramulisque glaberrimis, capsulis bicalcaratis ovatis gibbosis apice compressis intus læviusculis. *Brown in Lin. Soc. trans.* 10. *p.* 184. *Prodr. Fl. Nov. Holl. p.* 384. *Hort. Kew. ed. alt.* 1. *p.* 208.

This handsome shrub was first found by Mr. BROWN on the southern coast of New Holland in his voyage with Captain FLINDERS. And was introduced into the Kew Garden by Mr. PETER GOOD in 1803. The specimen from which our drawing was taken was communicated by Messrs. WHITLEY, BRAME, and MILNE, from their ample collection at Fulham, where it flowered in April 1821. It requires to be protected from frost.

N 2248.

DILLWYNIA CINERASCENS. GREY DILLWYNIA.

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Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus, bilabiatus, basi attenuatus. *Cor.* papilionacea, petalis staminibusque deciduis medio tubo calycis insertis: *vexilli* lamina duplo et ultra latior quam longa, divaricato-biloba. *Germen* dispermum. *Stylus* uncinatus. *Stigma* capitatum. *Legumen* ventricosum. *Semina* strophiolata. *Brown in Hort. Kew.*

Specific Character.

DILLWYNIA *cinerascens;* corymbis terminalibus sessilibus, foliis filiformibus erectis: mucrone innocuo brevissimo subrecurvo, ramulis calycibusque sericeis. *Brown MSS.*

Mr. BROWN possesses many species of this genus, which he divides into two sections; in one of which, the petals and stamens are deciduous; in the other (XEROPETALUM. *Br.*) these parts are marcescent. It is to the latter section that our present plant belongs. The three species recorded in the Hortus Kewensis, all belong to the first; and from this division the above generic character seems to have been more especially framed, the author having at first intended to have made distinct genera of them, but has since thought it more advisable to consider them only as sections of the same genus.

Native of Van Diemen's island; where it was found near the Derwent, by ROBERT BROWN, Esq. in the year 1804.

A hardy green-house shrub, requiring only protection from severe frost. Communicated by WILLIAM KENT, Esq. from his rich collection at Clapton.

At

At No. 1545, vol. 37 of this work, we have erroneously given a figure of DILLWYNIA *floribunda* under the name of *ericifolia*. The true *ericifolia* has a nearer resemblance to our present subject, but may be distinguished from it by the deciduous petals and stamens, the naked calyx, and pungently mucronated scabrous leaves. The specific character and synonyms there given should be expunged and the following inserted:

DILLWYNIA *floribunda*; floribus axillaribus geminis foliis subulatis mucronatis. *Hort. Kew. ed. alt.* 3. *p.* 15.
DILLWYNIA floribunda. *Smith in Lin. Soc. Trans.* 9. *p.* 262. *Exot. Bot. t.* 26.

N2248.

J. Curtis. Del.

Pub. by S. Curtis. Walworth. July. 1. 1821.

Wed del. Sc.

Onosma simplicissima. Siberian Simple Onosma.

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Class and Order.

Pentandria Monogynia.

Generic Character.

Corolla campanulata: fauce pervia. *Antheræ* basi hamosæ. *Semina* 4.

Specific Character and Synonyms.

Onosma *simplicissima*; corollis ventricosis, foliis lineari-lanceolatis hirtis. *Willd. Sp. Pl.* 1. *p.* 773.

Onosma *simplicissima*; pilis prostratis sparsis, caulibus floriferis simplicibus aggregatis, foliis linearibus acutiusculis, antheris filamentis brevioribus. *Marsch. a Bièb. Flor. taur. cauc.* 1. *p.* 133. *Id.* 3. *p.* 131. *Cent. Pl. rar. Ross.* 2. *t.* 57. *nondum visa.*

Onosma *simplicissima*; caule subsimplici, foliis lineari-lanceolatis hispidis subtus albido-pilosis, fructibus erectis. *Marsch. Casp. App. p.* 137. *Ann. of. Bot.* 2. *p.* 411.

Onosma sibirica. *Lam. illustr. n.* 1836.

At No. 889, in vol. 23 of this work, we have given a figure of the Onosma *taurica* of Marschall v. Bieberstein, in his account of the vegetable productions between the Terek and Kur rivers, which flow into the Caspian sea. This author in his Flora taurico-caucasica makes the same a variety of Onosma *stellulata* of the Flora Hungarica.

Onosma *simplicissima* differs from the above in the hairs of the leaves, especially on the under side, being much longer and softer, solitary and not stellulate, in the leaves being longer, narrower, and more pointed, and in the paler colour of the flowers; differences pointed out in the Flora taurico-

taurico-caucasica, all of which apply to our plant ; to these may be added the corolla being uniformly ventricose without the angles which appear in the corolla of *taurica*.

This species is described as having a number of simple stems growing in an aggregate manner ; but in our plant the lower part of the stem survived the preceding winter, and the flowering stalk with several shoots were produced from the top of it. Whether this circumstance was accidental, or a permanent variety of the ordinary state of the species we are not able to determine ; we cannot consider it as specifically distinct.

A hardy perennial ; native of Siberia. Flowers in May and June. Communicated by Mr. ANDERSON of the Chelsea Garden.

N.2249

J. Curtis Del.

Pub. by S. Curtis. Walworth July 2. 1821.

Weddell Sc.

STYLIDIUM TENUIFOLIUM. FINE-LEAVED STYLIDIUM.

****

Class and Order.

GYNANDRIA DIANDRIA.

Generic Character.

Cal. bilabiatus. *Cor.* irregularis, 5-fida: lacinia quinta (Labello) dissimili. *Columna* reclinata, duplici flexura. *Antheræ* bilobæ: lobis divaricatissimis. *Caps.* bilocularis. *Brown in Hort. Kew. 5. p. 222.*

Specific Character and Synonyms.

STYLIDIUM *tenuifolium*; suffruticosus, foliis angusto-linearibus sessilibus pilosiusculis, fauce nuda, labello appendiculato. *Brown Prodr. fl. Nov. Holl. p.* 570. *Encycl. bot. Suppl.* 5. *p.* 413.

STYLIDIUM *laricifolium*; caule elongato confertim folioso, foliis subsetaceo-linearibus, panicula pyramidato-ramulosa. *Richard in. Pers. Syn.* 2. *p.* 210. *Jussieu in Ann. du Mus. d'Hist. Nat.* 18. *p.* 19. *t.* 3.

In our account of another species of this curious genus, of which Mr. BROWN in his Prodromus has recorded and characterized no fewer than forty-five; we have given an account of the irritability of the column of fructification, which is equally remarkable in our present subject (*vide supra No.* 1918).

The STYLIDIUM *tenuifolium* forms a very small upright shrub, while all the rest of the known species, except one (STYLIDIUM *fruticosum*) are herbaceous.

Mr. LABILLARDIERE in the 6th volume of the Annales du Muséum d'Histoire Naturelle gave the true account of the structure of the flower of this genus, which, being ignorant that it was before established by Professor SWARTZ under its present

present name, he called Candollea; but afterwards he took up the notion that the stigma was not at the upper extremity of the column but at its base. M. Richard with as little probability considered the fifth lacinia of the corolla, the Labellum of Brown, as the true stigma; and Jussieu in the 18th volume of the Annales, even after the publication of Brown's Prodromus, has adopted the opinion of Richard, which, in the Linnæan system, would remove the genus from the class Gynandria to Monadelphia. But the English botanists still agree in considering the stigma to be placed at the upper extremity of the column, where it is partly covered by the anthers, and only becomes truly developed after the bursting of these organs.

The plant from which our drawing was made was communicated by Mr. Joseph Knight of the Exotic Nursery in the King's Road, where only we have as yet seen it. It is not recorded in the Hortus Kewensis, nor in Sweet's more extensive list, the Hortus Suburbanus.

Native of the country about Port Jackson in New South Wales. Requires the protection of a greenhouse, and blossoms better for the assistance of some artificial heat.

Fig. 1. The germen and calyx. 2. The pubescence surrounding the anthers. 3. The column. 4. The corolla: all magnified.

Pub.by S. Curtis Walworth July.e.1822.

W.d & W.L.Sc.

FURCRŒA GIGANTEA. GIGANTIC FURCRŒA.

****

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. supera, 6-petala, patula. *Filamenta* corolla breviora, inferne obovata; superne subulata. *Stylus* triqueter, basi incrassatus.

Specific Character and Synonyms.

FURCRŒA *gigantea*; caulescens, foliis integerrimis. *Hort. Kew. ed. alt.* 2. *p.* 302.

FURCRŒA gigantea. *Ventenat in Usteri Annal. der botan.* 19. *p.* 54. *Plant. grass.* 126 *.

AGAVE *fœtida*; caulescens foliis integerrimis, scapo ramoso, corollis hexapetalis. *Willd. Sp. Pl.* 2. *p.* 194. *Jacq. Collect.* 2. *p.* 212. *Icon. rar.* 2. *t.* 379. *Lin. Syst. Veg. ed.* 14. *p.* 388.

ALOE *americana*; viridi rigidissimo et fœtido folio Piet dicta indigenis. *Commel. Hort.* 2. *p.* 35. *t.* 18. *sine inflorescentia.*

This genus is rather too nearly allied to AGAVE, from which it has been separated by VENTENAT, and named in honour of M. FOURCROY, author of the elements of Natural History and Chemistry; a separation adopted in the Hortus Kewensis, but rejected by M. POIRET in his supplement to the Encyclopédie botanique. The principal points by which it differs from AGAVE are the shape of the stamens and corolla, the comparative length of these organs and the form of the style.

The FURCRŒA *gigantea* is a truly gigantic plant; the *scape* rising from the bosom of the leaves, which are seven feet long, to the height of above thirty feet, producing numerous

merous alternate branches, again divided into branchlets, one of which with its flowers is represented in our figure. A lanceolate marcescent *bracte* at the base of each branchlet, and small bractes at each pedicle. *Flowers* white, pendulous, on short slender stalks. *Germen* inferior, 3-cornered, striate, about an inch long, a little curved, 3-celled. *Petals* 6, oblong-lanceolate, equal, somewhat fleshy. *Filaments* 6, narrowed at both ends, broad in the middle, not half the length of the petals. *Anthers* oblong, versatile: *pollen* yellow. *Style* 3-cornered, longer than the stamens, hollow: *stigma* capitate, pubescent. *Nectaries* 3, oblong, spreading at the point, inserted at the base of the style. Under the outer bark the liber divides into very tough fibres.

The growth of the flowering stem was extremely rapid.

A specimen of one of the branches between four and five feet long, from one of the branchlets of which our drawing was taken, was sent us in December last by the Right Honourable Earl Powis, from his Lordship's seat at Wallcott, in Shropshire, together with a rough sketch of the whole plant.

This plant seems to have equalled in size that described and figured by Jacquin as above quoted; and, like it, produced a great number of viviparous bulbs.

Native of South America. Cultivated according to Mr. Aiton in 1690, at the Royal garden at Hampton-Court.

N.2251.

Pub.d by S. Curtis. Walworth. Aug. 2. 1802.

Widdell. Sc.

LOBELIA PEDUNCULATA. LONG-STALKED LOBELIA.

****

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala, irregularis. *Antheræ* cohærentes. *Caps.* infera, 2- s. 3-locularis.

Specific Character.

LOBELIA *pedunculata;* foliis petiolatis recurvis pinnatifidis: pinnis bifurcatis, pedunculis elongatis lateralibus solitariis subbifloris, caule suffruticoso.

This very rare species was communicated by Messrs. LODDIGES and SONS some years since. It is nearly related to, but specifically different from, LOBELIA *coronopifolia* (supra n. 644.) The flowers are much smaller, the colour of the tube purple; the peduncles, which are full as long as in *coronopifolia*, grow from the sides of the branches and are not confined to their extremities as in that; the leaves are entirely different.

Native of the Cape of Good-Hope, flowers in October and November; requires the shelter of a Greenhouse in the winter.

N.2252.

Pub. by J. Curtis, Walworth, Aug. 22 1822.

CRYPTOSTEMMA CALENDULACEA, α. MARY-GOLD-FLOWERED CRYPTOSTEMMA.

****

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Recept. favosum. *Pappus* paleaceus lana implexa seminis tectus. *Cal.* imbricatus. BROWN *in Hort. Kew.*

Specific Character and Synonyms.

CRYPTOSTEMMA *calendulacea;* ligulis indivisis, foliis pinnatifidis dentatis subtus tomentosis. *Br. in Hort. Kew. ed. alt. 5. p.* 141.

ARCTOTIS calendulacea. *Willd. Sp. Pl. 3. p.* 2347.

(α.) *foliis lyrato-pinnatifidis, ligulis tridentatis.*

ARCTOTIS *Calendula*, flosculis radiantibus sterilibus duodonis subintegris, foliis lyratis nigro-denticulatis. *Sp. Pl.* 1306.

ANEMONOSPERMOS africana, Jacobææ maritimæ foliis, flore sulphureo. *Commel. rar.* 36. *t.* 36. fig. bona.

ANEMONOSPERMOS afra, foliis et facie Taraxaci incanis. *Breyn. ic.* 27. *t.* 15.

(β.) *foliis runcinato-pinnatifidis, ligulis acutis integerrimis.*

ARCTOTIS *calendulacea;* flosculis radiantibus sterilibus, foliis runcinatis subtomentosis. *Syst. Veg. ed.* 14 *p.* 791. *Jacq. Hort. Schoenbr. 2. p.* 16. *t.* 157.

ANEMONÆ affinis æthiopica, fibrosa radice, flore Asteris, Taraxaci foliis subincanis. *Herm. Lugd.* 41. *t.* 42.

DESCR. *Leaves* lyrate-pinnatifid, three-nerved, on the upper side green, hispid: on the under tomentose, white. *Peduncles* at the ends of the branches two or three together, long, striate, clothed with weak red hairs, one-flowered.

Calyx

Calyx imbricate, *inner scales* rounded, smooth, with a purplish brown scariose margin : *outer ones* smaller, ovate, terminated with a pencil of soft white hairs, nodding before the flower expands. *Receptacle* honeycombed, bristly. *Germens* covered with wool, which nearly conceals the paleaceous pappus. *Floscules of the ray* many, sterile, slightly three-toothed at the point, two-ribbed, pale yellow, purplish underneath. *Floscules of the disk* hermaphrodite, cup-shaped, smooth, greenish, with a black-purple five-cleft border. *Anthers* connected, black-purple, shorter than the floscule. *Stigma* exserted, covered with the yellow *pollen*, cylindrical, finally divaricate.

CRYPTOSTEMMA is a genus established by Mr. ROBERT BROWN from the heterogeneous assemblage formerly arranged under ARCTOTIS, and has its name from the wool of the seed partly concealing the paleaceous pappus with which it is crowned.

There exists the greatest confusion in the synonomy of ARCTOTIS *calendulacea* and *hypochondriaca;* WILLDENOW has applied COMMELIN's synonym, which is a good representation of our plant, to both. JACQUIN's figure differs from our plant in the smaller size, in the leaves being narrower, in the florets of the ray being sharper pointed and quite entire, and of a greener colour ; but it should be observed that in drying, the florets of the ray in our plant become quite green and sharp pointed. It is possible that they may be distinct species, but we consider them as varieties, and have endeavoured to apply the synonyms adapted to each.

Native of the Cape of Good-Hope. A tender annual. Flowers in May and June. Communicated by Messrs CHANDLER and BUCKINGHAM of the Vauxhall Nursery

N.2253.

Del. Published as the Act directs Walworth Engraved Weddell Sc

DIGITATIS ORIENTALIS. LEVANT FOX-GLOVE.

****

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. 5-partitus. *Cor.* campanulata, 4—5-loba, ventricosa. *Caps.* ovata, 2-locularis.

Specific Character and Synonyms.

DIGITATIS *orientalis ;* foliolis calycinis lanceolatis pubescentibus, corollæ labio inferiori maximo spathulato. *Lamarck Encyl.* 2. *p.* 280. *Bot. Reg.* 554.

DIGITALIS *orientalis ;* calycinis foliolis oblongis acutis pubescentibus, corollæ lobis lateralibus labii inferioris obtussimis, intermedio spathulato ciliato plano, floribus distantibus, bracteis oblongis pubescentibus calyce brevioribus. *Willd. Sp. Pl.* 3. *p.* 286. *Persoon Syn.* 2. *p.* 163.

DIGITALIS orientalis Tragopogi folio, flore albido. *Tourn. Cor.* 9.

This plant was first discovered by the celebrated botanist TOURNEFORT, during his travels in the Levant ; and LAMARCK, in that valuable compilation, the botanical part of the *Encyclopédie Methodique,* has given a description of it from TOURNEFORT'S specimen, preserved in JUSSIEU'S herbarium. But M. POIRÉT, in the supplement to the same work, has erroneously referred this species to DIGITALIS *lanata ;* which, though nearly allied, is very distinct. The latter plant is figured at No. 1159 of the Botanical Magazine ; but we believe that a living specimen of *orientalis* has never been seen in this country, nor even in Europe, till the seed was transmitted from Constantinople to Sir JOSEPH BANKS by Lady LISTON, to whose zeal our gardens

gardens are indebted for several rare and some new plants. That from which our drawing was taken was raised from this seed, and flowered last April in Lady Banks's garden, at Spring Grove.

Digitalis *orientalis* differs from *lanata* in having a much more lax spike of flowers, which grow alternately and distant, are paler coloured, and have less of the ferrugineous reticulated marking within side, and none without; in having the calyx and the whole outside of the corolla more pubescent, but especially in having the upper and lateral segments rounded instead of pointed as in that; the radical and lower leaves are also much longer and narrower.

It is an herbaceous perennial; and we imagine must require protection from severe frost.

N. 2254.

Pub by S Curtis Watworth Aug 22 1822

Wedd sc

RUTA LINIFOLIA, β. LARGE-FLOWERED FLAX-LEAVED RUE.

****

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Petala* concava. *Recept.* punctis melliferis decem cinctum. *Caps.* lobata.

Specific Character and Synonyms.

RUTA *linifolia;* foliis lanceolatis subsessilibus glabris, paniculæ ramis pubescentibus, petalis ovatis. *Marsch. Fl. Taur.-Caucas.* 1. *p.* 309.

RUTA *linifolia;* foliis simplicibus lanceolatis glabris, filamentis ciliatis, caule simplici herbaceo. *Willd. Sp. Pl.* 2. *p.* 544. *Hort. Kew. ed. alt.* 3. *p.* 32. *Bot. Reposit.* 565.

RUTA sylvestris linifolia hispanica. *Bocc. Mus.* 2. *p.* 82. *t.* 73. *Barrel. ic.* 1186.

(β.) grandiflora; *foliis spathulato-lanceolatis glaucis, panicula congesta.*

RUTA montana foliis integris subrotundis. *Buxb. Cent.* 2. *p.* 30. *t.* 28. *f.* 2.

We should certainly have considered this plant as a distinct species from the RUTA *linifolia* figured by Mr. ANDREWS in the Botanists Repository; and Mr. HAWORTH, to whom we are indebted for the communication of the living specimen from which our drawing was made, from the garden of the late Mr. SWAINSON, is quite of the same opinion; but not having had ourselves an opportunity of comparing the plants together, we cannot venture to deviate from the decision of the learned and accurate author of the Flora Taurico-Caucasica.

Our plant grows, according to BUXBAUM, about Ridosto, in Romania. The late Mr. SYDENHAM EDWARDS observed that the flowers were possessed of a scent similar to that of cowslips.

J. Curtis Del.

Pub. by S. Curtis, Walworth, Aug. 1 1821.

Wed. Hill. Sc

Silene lacera. Jagged flowered Catchfly.

****

Class and Order.

Decandria Trigynia.

Generic Character.

Cal. monophyllus, ventricosus. *Petala* 5, unguiculata. *Caps.* supera, semitrilocularis, apice dehiscens, polysperma.

Specific Character and Synonyms.

Silene *lacera;* calycibus inflatis solitariis, petalis multifidis coronatis, foliis spathulatis undulatis; floralibus sessilibus, caule decumbente.

Cucubalus *lacerus;* petalis multifidis, calycibus campanulatis, foliis spathulato-ovatis, caule adscendente. *Flor. taurico-caucas. 3. p. 303. Steven in Mem. Soc. nat. Mosq. 3. p. 262. et in Trans. Lin. Soc. v. 11. p. 411. t. 34.*

Descr. *Stems* diffuse, decumbent, covered with a pubescence, which, when magnified, appears beaded or moniliform. *Leaves* ovate-spathulate, undulate with long, channelled, stem-embracing footstalks. *Upper ones* sessile, ovate-lanceolate. *Peduncles* mostly solitary, one-flowered, axillary and terminal. *Calyx* inflated, ten-streaked, five-cleft. *Corolla* white: *petals* lacerate, crowned with two oblong, distinct adpressed appendices. *Stamens* 10, five shorter, attached to the claw of the petal, and five longer, inserted into a glandular substance surrounding the base of the ovate *germen,* which is one-celled, without an appearance of septum that we could observe: *styles* three, sometimes only two.

This species was first described in the transactions of the Linnean Society by the Chevalier de Steven, who has likewise

likewise noticed the curious moniliform pubescence of the stem. But with respect to the corona, which in our plant was very distinct, this author remarks that there was scarcely any. In other respects we find nothing contradictory in the two descriptions.

Native of the eastern Caucasean Alps, where it grows amongst the fragments of Schistus. Flowers in May and June. Communicated by Mr. ANDERSON from the Chelsea garden.

Fig. 1. Represents the pistil with the five longer stamens. 2. One of the petals with a shorter stamen attached to the base of the claw, shewing also the corona.

N 2256

Pub. by S. Curtis Watworth. Aug 1822.

GLOBULARIA VULGARIS. COMMON GLOBULARIA OR BLUE DAISY.

****

Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Cal. communis imbricatus; *proprius* tubulatus, inferus. *Corollulæ* labio superiore 2-partito; inferiore 3-partito. *Recept.* paleaceum.

Specific Character and Synonyms.

GLOBULARIA *vulgaris*; caule herbaceo, foliis radicalibus obovatis retusis petiolatis; caulinis lanceolatis.

GLOBULARIA *vulgaris*; caule herbaceo, foliis radicalibus tridentatis; caulinis lanceolatis. *Sp. Pl.* 139. *Willd.* 1. *p.* 540. *Hort. Kew. ed. alter.* 1. *p.* 222. *Schkuhr handb.* 1. *p.* 65. *t.* 21. *Pollich Palat.* 1. *p.* 138. *Scop. Carniol. n.* 132.

GLOBULARIA *vulgaris*; caule herbaceo folioso, foliis radicalibus petiolatis obovatis subedentulis; caulinis lanceolatis. *Lam. Encycl.* 2. *p.* 730. *Id. Illustr. t.* 56. *f.* 1.

GLOBULARIA foliis radicalibus emarginatis, ex nervo aristatis, caulinis lanceolatis. *Hall. Hist. n.* 218.

BELLIS cærulea caule folioso. *Bauh. Pin.* 262.

BELLIS cærulea apula et monspeliaca. *Tabern. Kreuterbuch* 709. *f.* 1. & 2. *Lob. ic.* 478.

APHYLLANTHES Anguillaræ, sive Globularia bellidi similis. *Bauh. Hist.* 3. *part* 1. *p.* 13. cum icone.

DESCR. *Radical leaves* obovate-spathulate, quite entire or somewhat emarginate at the apex with a small projection of the middle nerve, smooth, many, spreading about. *Stem* from three to six inches high, erect, clothed with oblong oval *leaves*, irregularly scattered, sessile. *Flowers* blue, in a dense

a dense globular head. *Involucrum* or *common calyx* of many leaflets, like the cauline leaves, but smaller. *Calyx proper* tubular, five-cleft: teeth subulate, acute, ciliated. *Corolla* monopetalous: *laciniæ* five, filiform, unequal: the three upper ones three or four times longer than the two lower. *Stamens* 4, distinct, longer than the corolla: *anthers* two-lobed, deep blue. *Style* shorter than stamens; *stigma* bifid. *Receptacle* paleaceous. Taste of the leaves slightly bitter.

This plant apparently varies very much in the size of the radical leaves, which in our specimen, with the footstalk, rarely equalled an inch in length, whereas Pollich describes them as being four inches and a half long; perhaps more than one species have been confounded together. The three teeth at the apex of the leaf are very frequently wanting altogether, and are always much less remarkable than in Globularia *Alypum*. According to Scopoli the leaves of the former year are emarginate with a mucro in the middle and the young leaves three-toothed.

Native of Switzerland and the south of Europe. Flowers in May. Communicated by Mr. Anderson from the Chelsea garden, who received it from Switzerland through Mr. Schleicher.

N2257.

Pub. by J. Curtis Walworth. Aug 1 1822.

CHAPTALIA TOMENTOSA. WOOLY-LEAVED CHAPTALIA.

****

Class and Order.

SYNGENESIA POLYGAMIA NECESSARIA.

Generic Character.

Receptaculum nudum. *Pappus* simplex. *Flosculi radii* in duplici serie difformes, feminei. *Flosculi disci* masculi bilabiati.

Specific Character and Synonyms.

CHAPTALIA *tomentosa;* foliis obovato-oblongis retrorsum denticulatis supra lanatis subtus argenteo-tomentosis, flore nutante.

CHAPTALIA *tomentosa;* foliis ovato-oblongis integerrimis subtus argenteo-tomentosis, scapo nudo unifloro, flore nutante. *Pursh. Fl. Amer. Sept. 2. p.* 577.

CHAPTALIA integrifolia. *Ventenat Cels.* 61. *Nuttall Gen. 2. p.* 182.

TUSSILAGO *integrifolia;* foliis oblongo ovalibus integerrimis, scapo nudissimo nutante unifloro: ligulis radiantibus femineis; flosculis extimis filiformibus femineis; intimis infundibuliformibus submasculis. *Michaux Flor. Bor. Amer. 2. p.* 121.

TUSSILAGO *integrifolia;* scapo unifloro nudo, flore radiato nutante, foliis sessilibus oblongo-lanceolatis obtusis denticulatis subtus tomentosis. *Willd. Sp. Pl. 3. p.* 1964.

PERDICIUM semiflosculare? *Walt. Flor. Carol. n.* 318.

DESCR. Leaves radical, oblong-obovate, obtuse, narrowed at the base into a short petiole, margin denticulate with teeth directed downwards, green and woolly on the upper surface, and covered with a dense white cottony pubescence on

on the under. *Scape* without bractes, upright, one-flowered, cottony, twice or three times longer than the leaves. *Calyx* cylindrical: leaflets linear, lower ones shortest. *Flowers* white, nodding. *Ray* many-flowered, quite entire, female: within the ray is a row of *female florets* with an imperfect petal, shorter than the style, and within that another row, likewise female, without any corolla: *stigma* bifid revolute. *Male florets* confined to the centre of the disk, bilabiate: *upper lip*, in our specimen, apparently quite entire, *lower lip* generally two-cleft, both revolute.

Our plant having been brought from Paris by Mr. Walker, there can be little doubt but that it is the same with Ventenat's; but his figure represents the leaves as quite entire and the flower nearly upright. Pursh and Michaux also both describe the leaves as quite entire. But the description by Nuttall, who had no doubt seen the living plant, agrees well with our own observation. The denticulation being in all cases small, and in some perhaps nearly obsolete, might escape notice in dried specimens, and indeed, as the leaf shrinks in drying, are nearly concealed by the thick tomentum, which extends quite to the edge.

Chaptalia, a genus established by Ventenat and named in honour of M. Chaptal, will comprehend likewise Tussilago *nutans*, *albicans*, *dentata*, and perhaps some other species, together with part of the genus Perdicium. We doubt indeed whether Tussilago *dentata* of Linnæus taken up from Plumier (Icon. 40. f. 2.) be not the same species with our plant.

A hardy perennial. Native of North America. Communicated by John Walker, Esq.

N. 2258.

EUPHORBIA EPITHYMOIDES. BROAD-LEAVED SPURGE.

****

Class and Order.

DODECANDRIA TRIGYNIA.

Generic Character.

Cor. 4- s. 5-petala, calyci insidens. *Cal.* 1-phyllus, ventricosus. *Caps.* 3-cocca.

Specific Character and Synonyms.

EUPHORBIA *epithymoides;* umbella quinquefida: trifida: subbifida, involucellis ovatis, foliis obovato-oblongis subtus villosis, capsulis papilloso-hispidis.

EUPHORBIA *epithymoides;* umbella quinquefida: bifida, involucellis ovatis, foliis lanceolatis obtusis subtus villosis. *Sp. Pl.* 656. *Syst. Veg. ed.* 14. *p.* 452. *Jacq. Flor. Austr.* 4. *p.* 23. *t.* 344.

EUPHORBIA *epithymoides;* umbella quinquefida: bifida, involucellis ovatis dentatis, foliis integerrimis lanceolatis obtusis retusis subtus villosis, capsulis papilloso-hispidis. *Willd. Sp. Pl.* 2. *p.* 909. *Persoon Syn.* 2. *p.* 16. *Hort. Kew. ed. alt.* 3. *p.* 165. *Bot. Repos.* 616.

TITHYMALUS epithymi fructu. *Col. Ecphr.* 2. *p.* 52. *t.* 51 ?

PEPLIOS altera species. *Bauh. Pin.* 292 ?

JACQUIN observes that the *Involucrum* of this species consists of five leaflets nearly like those of the stem: and says the umbel is generally divided into five rays, which are again divided into three, and these into two. In cultivation there is less constancy in the numbers of the divisions of the umbel. The stem, leaves, and involucella, are covered with a dense soft pubescence scarcely visible to the naked eye, but more evident in the young state. We have never

seen

seen the leaves nearly so broad in proportion to their length as they are represented in the figure in the Botanist's Repository. The plant described and figured by COLUMNA, which is quoted as a synonym by LINNÆUS, is so different from JACQUIN's, that this author expresses a doubt of its being the same, though he speaks confidently of his own, being the same species as that of LINNÆUS.

A hardy perennial. Native of Austria. Flowers in May and June. Cultivated according to DONN in 1805. Communicated by Mr. ANDERSON from the Chelsea garden.

N.2259.

SESELI GUMMIFERUM. GUMMY MEADOW-SAXIFRAGE.

****

Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Umbellæ globosæ. *Involucrum* folio uno alterove. *Fructus* ovatus striatus.

Specific Character and Synonyms.

SESELI *gummiferum ;* involucellis monophyllis multifidis umbellulas æquantibus, foliis subtripinnatis glaucis : pinnulis cuneatis trifidis.

SESELI *gummiferum ;* involucellis polyphyllis : foliolis lanceolato-linearibus basi lato-connexis, flosculis subsessilibus, caule folioso, foliolis cuneiformibus. *Sm. Exotic Bot. t.* 120.

SESELI *gummiferum ;* involucellis polyphyllis basi connatis, foliis subtripinnatis glaucis. *Poir. Encycl. suppl.* 5 *p.* 139.

Sir JAMES SMITH has remarked that this species is nearly related to SESELI *Hippomarathrum ;* and it seems to have a still nearer affinity with SESELI *dichotomum,* a species probably not known to him at that time. Indeed it appears to us, that these three species might with advantage be separated from the genus SESELI, from the true species of which they all differ in having a monophyllous calyx, or one in which the leaflets are all broadly united at their base, and perhaps also in the form of the seed, but whether this is alike in all the three in question we have not had an opportunity of examining.

This plant was first found by PALLAS in the Crimea, who has repeatedly mentioned it, without giving any description

or

or figure. But it has since been both described and figured in Exotic Botany by our friend Sir James Edward Smith, from specimens received from Mr. Lambert and the late Lady Amelia Hume. This plant, as well as Seseli *dichotomum* when wounded in dry and warm weather exudes a strong-smelling gum-resin.

A hardy perennial. Flowers in August and September. Communicated by Mr. Anderson from the Chelsea Garden.

N. 2260.

Curtis del

Pub by S Curtis Watworth Sept 1st 1823

Dodd sc

SPARTIUM RADIATUM. STARRY BROOM.

****

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Stigma longitudinale, supra villosum. *Filamenta* germini adhærentia. *Cal.* deorsum productus.

Specific Character and Synonyms.

SPARTIUM *radiatum ;* foliis ternatis linearibus, petiolis dilatatis persistentibus, racemis capitatis terminalibus, ramis angulatis. *Willd. Sp. Pl. 3. p. 934. Hort. Kew. ed. alt. 4. p. 257.*

SPARTIUM *radiatum ;* foliis ternatis linearibus sessilibus, petiolis persistentibus, ramis oppositis angulatis. *Sp. Pl.* 996. *Mill. icon. t.* 259. *f.* 1.

SPARTIUM *radiatum ;* ramis oppositis tetragonis stipula foliorum persistente fultis, apice umbellatim floriferis, foliis ternatis linearibus subverticillatis. *Jacq. Collect. 3. p.* 83.

SPARTIUM minimum montanum triphyllon. *Col. Ecphr.* 1. *p.* 295. *t.* 294. fig. bona.

GENISTA *radiata ;* foliis oppositis ternatis linearibus, petiolis persistentibus brevissimis dorso tricarinatis. *Lam. Encycl. 2. p. 622.*

GENISTA radiata. *Scop. Carn. 2. p.* 51.

GENISTA radiata seu stellaris. *Bauh. Hist.* 1. *part* 2. *p.* 399. cum icone. *Raj. Hist.* 1727.

The ternate subulate leaves of this plant being opposite, give it a verticillated aspect, which at once distinguishes it from the rest of the genus. LAMARCK observes that there are no characters in the fructification by which SPARTIUM and GENISTA can be distinguished from each other; on which

which account he has, as well as JUSSIEU, united them into one genus, and remarks that GENISTA *lusitanica* of LINNÆUS in its characters taken from the fructification, corresponds in every respect with our present plant, and that indeed, except by the spines of the former, these two plants could hardly be distinguished as species. On the other hand MÖNCH has made three other genera out of these two, under the names of GENISTOIDES, GENISTELLA, and SCORPIUS.

SPARTIUM *radiatum* forms a low branched shrub, which is sufficiently hardy to bear the cold of our ordinary winters. Native of Italy and Carniolia. Cultivated by PHILIP MILLER in 1758. Flowers in June and July. Communicated by JOHN WALKER, Esq.

N.2261.

Orobus niger. Black Bitter-Vetch.

****

Class and Order.

Diadelphia Decandria.

Generic Character.

Stylus linearis. *Cal.* basi obtusus : laciniis superioribus profundioribus, brevioribus.

Specific Character and Synonyms.

Orobus *niger;* caule ramoso, foliis sexjugis ovato-oblongis. *Willd. Sp. Pl.* 3. *p.* 1076. *Spec. Pl.* 1028. *Hort. Kew. ed alt.* 4. *p.* 304. *Pollich Pal. n.* 674. *Scop. Carn. v.* 2. *p.* 59. *Decand. Fl. Franç.* 4. *p.* 586. *Fl. danica. t.* 1170.

Orobus caule ramoso ; foliis ovatis, duodenis. *Hall. Hist. n.* 418.

Orobus pannonicus I. *Clus. Hist.* 2. *p.* 230. *Clus. Pannon. p.* 737. *icon ad finem appendicis.*

Orobus sylvaticus viciæ foliis. *Bauh. Pin.* 352. *Rivin. Pentap.* 60.

Astragaloides. *Dod. Pempt.* 551.—altera *Lob. ic.* 2. *p.* 78.

A rather ornamental hardy herbaceous perennial, which owes its name to the circumstance of its always turning black in drying. Haller remarks that its roots are sweet. Native of most parts of Europe, but not of Britain. Cultivated in 1596 by John Gerard. Flowers in June and July. Communicated by John Walker, Esq.

N.2262.

Cineraria aurantiaca. Orange-coloured Cineraria.

Class and Order.

Syngenesia Polygamia Superflua.

Generic Character.

Recept. nudum. *Pappus* simplex. *Cal.* simplex, polyphyllus, æqualis.

Specific Character and Synonyms.

Cineraria *aurantiaca ;* floribus subternis terminalibus, caule simplici, foliis radicalibus ovatis obsolete crenatis ; caulinis lanceolatis integerrimis, calycibus sphacelatis. *Willd. Sp. Pl. 3. p.* 2081. *Poir. Encycl. Suppl. v.* 2. *p.* 264.

Cineraria *aurantiaca ;* foliis radicalibus ovatis petiolatis subdentatis ; caulinis linearibus integerrimis decurrentibus, caule paucifloro. *Hoppe cent. pl.* 4.

Cineraria *aurantiaca* (β.) tomentosa. *Dec. Fl. Franç.* 4. *p.* 170. *Lodd. Cab.* 325.

Cineraria *alpina*. var. *Wulfen in Jacq. Miscell.* 1. *p.* 156. *t.* 17. *f.* 4. *All. Ped. n.* 738. *t.* 38. *f.* 2.

Cineraria integrifolia. *Vill. Dauph.* 3. *p.* 225.

Descr. *Radical leaves* ovate, petiolate, subcrenulate. *Stem* erect, about six inches high, tomentose. *Cauline leaves* lanceolate, quite entire. *Flowers* in a terminal corymb from two to four, of a red orange colour, both the ray and disk. *Calyx* cylindrical. *Leaflets* in one simple series, sphacelate at the tip. *Pappus* sessile, simply hairy. Stem and leaves covered with a thick, white, cottony tomentum. There is said to be a variety with smooth leaves.

Native of the Alps of Dauphiny, in Piedmont, and of Mount Cenis. Flowers in May. Communicated by Mr. Anderson from the Chelsea Garden. Is not recorded in the Hortus Kewensis, nor in Sweet's Hortus Suburbanus.

N.2263.

J. Curtis Del.

Pub. by S. Curtis, Walworth, Sept. 22nd.

Wood Col.

Erica sanguinolenta. Dark-flowered Heath.

****

Class and Order.

Octandria Monogynia.

Generic Character.

Cal. 4-phyllus. *Cor.* persistens: limbo 4-fido. *Antheræ* ante anthesin per foramina duo lateralia connexæ. *Caps.* 4—8-locularis, 4—8-valvis.

Specific Character and Synonym.

Sect. VI. Parvifloræ B. Antheræ aristatæ. Folia terna.

Erica *sanguinolenta;* floribus terminalibus, foliis linearibus mucronulatis, corollis cyathiformibus hirtis pedunculis remote bibracteatis longioribus, stylo exserto.
Erica sanguinolenta. *Lodd. Cab.* 468.

A low thickly-branched *shrub,* seldom exceeding eight inches in height. *Leaves* linear, mucronulate, smooth or clothed with thinly scattered hairs, about one third of an inch long, ternate. *Flowers* very numerous, of a very dark blood colour, terminal on small branches, usually four together, sometimes three, two, or only one. *Peduncles* shorter than the corolla, with two minute bractes distant from the *calyx,* whose leaflets are ovate, closely adpressed to the cup-shaped *corolla,* covered on the outside with white glandular hairs, very open at the mouth: *border* four-cleft, erect. *Anthers* very dark, shorter than the tube of the corolla. *Style* exserted: *stigma* capitate.

Native of the Cape of Good Hope. Flowers most part of the Summer. Propagated by cuttings. Communicated by Messrs. Loddiges and Sons.

J.Curtis. Del.

Pub.by S.Curtis Walworth. Septr 1.1801.

W.Alais

PÆONIA PUBENS. DOWNY PEONY.

Class and Order.

POLYANDRIA DIGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5. *Styli* 0. *Caps.* polyspermæ.

Specific Character and Synonym.

PÆONIA *pubens;* foliis biternatis; foliolis lanceolatis subtus mollissime pubescentibus, germinibus albido-tomentosis, stigmate suborbiculato, caule petiolis pedunculisque hirsutis.

PÆONIA lobata. *Desfont. Cat. Hort. Paris?* vix De Candollii.

This plant was received from the Royal garden at Paris by our friend ALEXANDER MAC LEAY, Esq. under the name of PÆONIA *lobata*, and may therefore be the species so called by M. DESFONTAINES, in his catalogue of the garden. It can however hardly be the *lobata* described by M. DE CANDOLLE, in his Regni Vegetabilis Systema Naturale, as he describes his plant to be in every part smooth, and the division of the leaves as totally different. In our specimen the *leaflets* were lanceolate, very much pointed, smooth above, but very villous underneath; the stem, the petioles, and peduncles hairy; *germens* 2, covered with a white tomentum, and crowned with a round, cap-like, deep-purple *stigma*; *filaments* of a deep crimson colour: *anthers* oblong.

It flowered in Mr. MAC LEAY's garden in May last; and also in that of the Horticultural Society. Mr. SABINE, who has probably the largest collection of Peonys extant, considers it as entirely different from any species described in the highly valuable monograph on this genus by the late GEORGE ANDERSON, Esq. published in the twelfth volume of the transactions of the Linnean Society; a work that we regret

regret we neglected to consult when giving our account of the Pæonia *Moutan* var. *papaveracea*. No. 2175.

It is a hardy perennial; its native country unknown; indeed it is uncertain whether it is the natural product of any, or the produce of cultivation, as Mr. Sabine suspects may be the case, not with this only, but with some others that are at present regarded as distinct species.

Curtis Del. Pub. by S. Curtis. Walworth. Oct 22 1822. Waddell. Sc

SPARTIUM VIRGATUM. LONG-TWIGGED BROOM.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Stigma longitudinale, supra villosum. *Filamenta* germini adhærentia. *Cal.* deorsum productus.

Specific Character and Synonyms.

SPARTIUM *virgatum;* foliis simplicibus lanceolatis, ramis virgatis striatis diffusis, racemis terminalibus. *L'Herit. Stirp. nov. 2. p.* 183: in conspectu fasciculi septimi nunquam editi.

SPARTIUM *virgatum;* ramis teretibus striatis, foliis lanceolato-oblongis sericeis, calycibus infundibuliformibus bilabiatis hirtis, vexillo carinaque pubescentibus. *Hort. Kew. ed. I. 3. p.* 11.

SPARTIUM *virgatum;* ramis teretibus striatis, floribus axillaribus solitariis subracemosis, vexillis carinaque pubescentibus, foliis oblongo-lanceolatis sericeis. *Willd. Sp. Pl. 3. p.* 928. *Hort. Kew: ed. alt. 4. p.* 255.

CYTISUS *tener;* foliis simplicibus lanceolatis, ramis teretibus. *Syst. Veg. ed.* 14. *p.* 667. *Jacq. Collect.* 1. *p.* 40. *Ic. rar.* 1. *t.* 147.

GENISTA gracilis. *Poiret Encycl. Bot. 2. p.* 715.

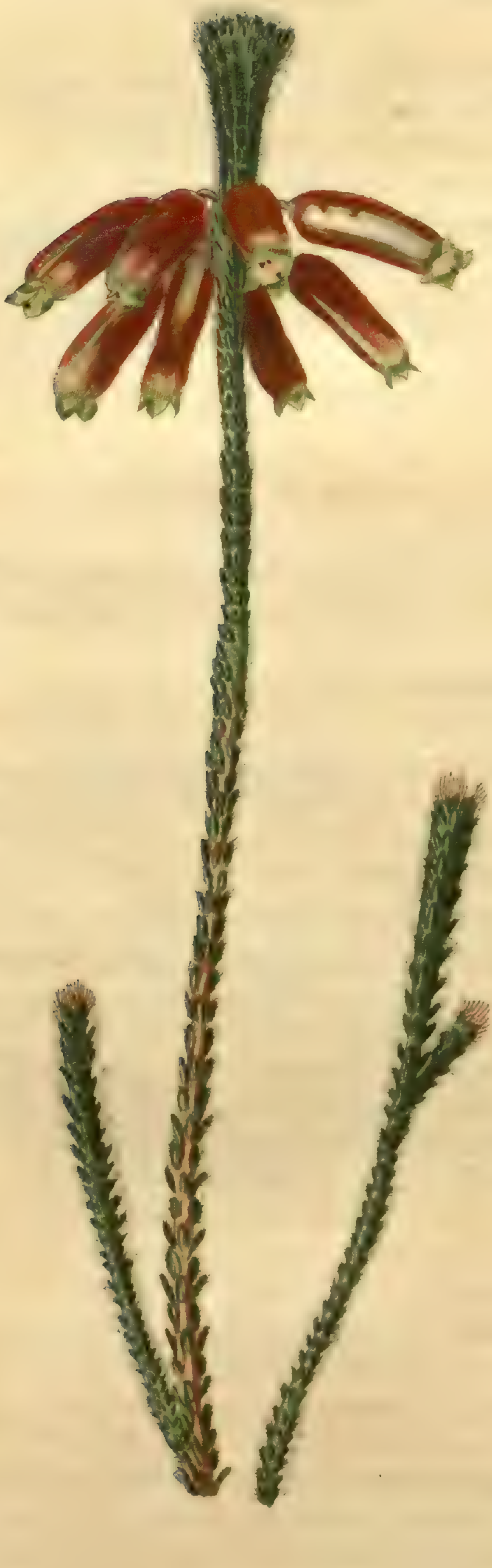
In our specimens the flowers grow constantly in terminal few-flowered racemes, on very short branches, and are so described in JACQUIN's Collectanea. WILLDENOW, however, has altered the character, and described the flowers as axillary and solitary, on which account we have preferred that given by L'HERITIER. We suspect that specimens of

SPARTIUM

Spartium *purgans* have been sometimes confounded with this plant.

Native of Madeira, and usually considered as a greenhouse shrub; but according to the experience of Mr. Walker, in a trial of one winter at Southgate, it appears to be hardy enough to bear being exposed without shelter. Flowers from March to June. Introduced to the Kew Garden in 1777. Propagated by cuttings.

N.2266.



Pubd by S. Curtis. Walworth. Oct. 1. 1802.

Erica gemmifera. Gem-bearing Heath.

****

Class and Order.

Octandria Monogynia.

Generic Character.

Cal. 4-phyllus. *Cor.* persistens : limbo 4-fido. *Antheræ* ante anthesin per foramina duo lateralia connexæ. *Caps.* 4—8-locularis, 4—8-valvis.

Specific Character and Synonym.

Sect. II. Longifloræ. F. *Antheræ* muticæ. *Folia* quaterna. *Flores* axillares. *Bracteæ* 2-calyci proximæ, tertia remota.

Erica *gemmifera ;* ramis apice clavatis foliis ovatis ciliatis aristatis, tubo corollæ apice angustato.
Erica gemmifera. *Lodd. Cab. n.* 457.

This species has a very near affinity with Erica *Massoni,* but differs in the greater length of the flowering branches, in the sterile ones being thickened instead of contracted at the extremity ; in the leaves being shorter and more erect ; in the whorl consisting of fewer flowers, having the tube narrowed at the extremity, not inflated as in *Massoni.*

The flowers shine like a gem, being covered with a resinous varnish, more solid, and consequently less viscous than in *E. Massoni.*

A native of the Cape of Good Hope. Flowers in the summer months. Propagated by cuttings. Will not bear over watering. Communicated by Messrs. Loddiges and Sons, according to whom it was introduced in 1802.

RANUNCULUS CASSUBICUS. CASSUBIAN CROWFOOT.

****

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5, intra ungues poro mellifero. *Sem.* nuda.

Specific Character and Synonyms.

RANUNCULUS *cassubicus ;* foliis radicalibus reniformibus crenatis ; caulinis digitatis serratis ; supremis linearibus subintegerrimis, caule multifloro.

RANUNCULUS *cassubicus ;* foliis radicalibus subrotundo-cordatis crenatis ; caulinis digitatis dentatis, caule multifloro. *Sp. Pl.* 775. *Willd.* 2. *p.* 1314. *Hort. Kew. ed. alt.* 3. *p.* 353. *Lam. Encycl.* 6. *p.* 108.

RANUNCULUS *cassubicus ;* foliis glabris radicalibus petiolatis reniformibus crenatis, caulinis in lobos lineares serratos partitis. *Dec. Syst. Veg. nat.* 1. *p.* 267.

RANUNCULUS *aconitifolius* folio rotundo ad radicem præstolante. *Loes. Pruss.* 225. *t.* 72.

RANUNCULUS rotundifolius vernus sylvaticus major vel cassubicus, folio Thoræ seu Calthæ. *Breyn. Prodr.* 1. *p.* 45. *Tourn. inst.* 285.

The leaflets at the first division into branches are represented by LŒSEL, as in our figure, oblong-ovate, and by no means linear, an epithet that at most can only be applied to the uppermost leaf.

This species has been by some, with very little reason, regarded as a variety of RANUNCULUS *auricomus ;* from which it appears to us to be totally distinct.

A hardy perennial, rarely to be met with in our gardens, having neither beauty nor fragrance to recommend it to cultivators. Native of Prussia, Pomeranian Cassubia, and Siberia. Introduced in 1794 by Messrs. LODDIGES and SONS, by whom it was communicated to us.

Pubd by S. Curtis, Walworth, Octr 1 1801.

Weddell. Sc

N.2268.

Pub. by S. Curtis Watworth Oct 1 1826.

Weddell Sc

MELALEUCA DECUSSATA. DECUSSATE MELALEUCA.

****

Class and Order.

POLYADELPHIA ICOSANDRIA.

Generic Character.

Staminum phalanges 5, petalis oppositæ, elongatæ : *Antheræ* incumbentes. *Caps.* 3-locularis, polysperma, connata et inclusa calycis tubo incrassato basi adnato (ramo). BROWN.

Specific Character and Synonyms.

MELALEUCA *decussata ;* foliis oppositis decussatis ovali-lanceolatis trinervibus, spicis ovalibus glaberrimis, phalangibus polyandris : unguibus brevissimis. *Brown in Hort. Kew. ed. alt. 4. p.* 415.

An elegant flowering shrub, first discovered by our friend ROBERT BROWN, Esq. on the south coast of New Holland, near the port of Lincoln. Introduced into the Kew garden in 1803. The leaves in this species are opposite crosswise, making four equal ranks ; and like most of the natural order are aromatic, having a slight taste of Cajeput.

Cultivation makes a considerable change in the inflorescence of this shrub ; the flowers often appearing to grow in roundish heads on peduncles ; but these are in reality branches, with sessile flowers ; and after the flower decays are elongated, and the part of the branch on which the fruit grows is thickened, so that the capsules become half immersed in the wood.

Flowers from June to September. Requires the shelter of a greenhouse. Propagated by cuttings. Communicated seven years ago by Messrs. LODDIGES and SONS.

T. Curtis Del. Pub. by S. Curtis. Walworth. Oct. 1. 1802. Woodcut.

LAVATERA PLEBEIA. MALLOW-LIKE LAVATERA.

****

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. duplex: exterior trifidus. *Caps.* plurimæ, monospermæ.

Specific Character.

LAVATERA *plebeia;* caule herbaceo scabro, foliis quinquelobatis subtus pubescentibus, pedunculis axillaribus aggregatis, petalis cuneiformibus emarginatis acutis.

DESCR. *Stem* erect, five or six feet high, scabrous. *Leaves* generally five-lobed, with the lower lobe sometimes divided, the terminal one elongated, smooth above, green-tomentose underneath, margin crenate: *Petioles* the length of the lamina, with which they are united by a sort of joint. *Peduncles* aggregate (in the specimen from which our figure was taken solitary), of unequal lengths, swelled at the upper extremity. *Outer Calyx* half three-cleft, obtuse; *inner Calyx* half five-cleft, acute. *Flowers* very like those of the common mallow: *Petals* striate, wedge-shaped, emarginate: *Claws* distant above, united at the base. *Seeds* about twelve, surrounding a conical receptacle.

Our drawing was taken from a small plant raised in a pot, communicated by Mr. KNIGHT, of the Exotic Nursery, in July; but our description from vigorous plants growing in the open ground at Messrs. WHITLEY, MILNE, and BRAME'S in September. In the latter the middle lobe of the leaves was more elongated, and the flowers usually aggregate, from two to five together. The stem had all the appearance of being herbaceous, but in a specimen kept in a pot at Mr. KENT'S after the flowering was over, the stem became ligneous and put forth fresh shoots the whole length;

length ; so that it may be either herbaceous or frutescent, according to the treatment.

Native of New Holland ; first observed in one of the late expeditions beyond the Blue mountains. Mr. Brown collected a nearly related, but distinct species, on the southern coast.

N 2270.

J. Curtis. Del. Pub. by S. Curtis, Walworth, Oct. 22 S22. Wed. Bell. Sc.

GAZANIA UNIFLORA. GOLDEN-FLOWERED GAZANIA.

****

Class and Order.

SYNGENESIA POLYGAMIA FRUSTRANEA.

Generic Character.

Recept. epaleatum (nudum; v. alveolatum germinibus exsertis). *Semina* villosissima. *Pappus* piloso-paleaceus *Cal.* monophyllus: tubo foliolis imbricatis tecto v. nudo. BROWN.

Specific Character.

GAZANIA *uniflora;* caule fruticoso decumbente, foliis spathulato-lanceolatis subtus tomentosis, scapo unifloro calyceque glaberrimis, radio concolore.

GORTERIA *uniflora;* herbacea, foliis obovato-oblongis obtusis subtus niveo-tomentosis, caule decumbente, pedunculis unifloris. *Thunb. Prodr.* 162. *Act. Soc. Nat. Hafn. v.* 4. *pars.* 2. *p.* 5. *t.* 2. *f.* 2.

GORTERIA *uniflora;* caulibus unifloris depressis, foliis lanceolatis indivisis subtus tomentosis. *Lin. Suppl. p.* 382. *Syst. Veg. ed.* 14. *p.* 784.

The habit of this plant is exactly that of GAZANIA *rigens* (GORTERIA rigens. *Bot. Mag. t.* 90), and the leaves shew somewhat of the same tendency to become lobed. But the calyx is smoother than that of the latter, which, though otherwise smooth, has ciliated segments; the flower is much smaller, and wants the dark purple eye at the base of the ray, this part and the disk being of one uniform colour, except a slight increase of intensity towards the base of the ligulæ.

Native of the Cape of Good Hope, on the sea coast, near the river Zecko. Flowers in July and August. Propagated by cuttings. Communicated by Mr. JOSEPH KNIGHT, from his extensive collection at the Exotic Nursery, Kings-road.

Pubd by S. Curtis, Walworth, Surrey.

PHYTEUMA SCORZONERIFOLIA. SCORZONERA-LEAVED RAMPION.

****

Class and Order

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Cor.* rotata, 5-partita, laciniis linearibus. *Stigma* 2– s. 3-fidum. *Caps.* 2– s. 3-locularis, infera.

Specific Character and Synonyms.

PHYTEUMA *scorzonerifolia ;* spica elongata cylindrica, foliis lineari-lanceolatis canaliculatis dentato-serratis, stigmate bifido.

PHYTEUMA *scorzonerifolium ;* spica elongata cylindrica, floribus inferioribus remotis, foliis lanceolatis crenatis ; superioribus linearibus. *Willd. Enum. p.* 215.

PHYTEUMA *scorzonerifolia ;* foliis omnibus oblongis leviter crenatis ; supremis linearibus, spica elongata. *Villars Dauph.* 2. *p.* 519. *t.* 12. *f.* 2. Excluso synonymo Allioni. *De Cand. fl. franç.* 3. *p.* 713.

DESCR. *Stem* erect, simple, smooth. *Leaves* linear-lanceolate, decurrent down the footstalk, dentate-serrate, sides folded inwards, smooth. *Spike* oblong. *Flowers* crowded together, subsessile. *Bractes* shorter than the small, campanulate, five-toothed *Calyx* with linear distant segments. *Corolla* 5-cleft : *laciniæ* linear, united at the point and bulging open downwards ; but after flowering distinct the whole length and twisted about irregularly. *Stamens* five : *Anthers* oblong, red, quickly shedding their purple *Pollen ;* with which the style is entirely covered when first projected and appears club-shaped, but afterwards the

Stigma

Stigma becomes bifid and recurved, by which, as well as by the length of the spike and want of the long bractes, it is distinguished from PHYTEUMA *Scheuchzeri*. *(Supra t.* 1797*)* which has a trifid stigma. Varies with a white flower.

Native of the Alps of Dauphiny. A hardy perennial. Flowers in July and August. Communicated by Mr. ANDERSON from the Chelsea Garden. Is not recorded in the last edition of the Hortus Kewensis.

J. Curtis. Del.

Pub by J. S. Curtis. Walworth. October 1822.

Aloe Microcantha. Small-spined Aloe.

****

Class and Order.

Hexandria Monogynia.

Generic Character.

Cor. erecta, ore patulo, fundo nectarifero. *Filamenta* receptaculo inserta.

Specific Character and Synonyms.

Sect.* Corollis cylindricis reflexis.

Aloe *microcantha ;* foliis lineari-loratis canaliculatis margine spinulosis, racemo umbellato laxo, pedunculis corolla longioribus.

Aloe *microcantha ;* foliis anguste ensiformibus inferne albomaculatis, maculis sæpe tuberculiformibus oblongis sparsis numerosis, spinis marginalibus rectis albis minutissimis. *Haworth Suppl. Pl. succul. p.* 105.

Descr. *Leaves* linear-lanceolate, scarcely a foot and a half long, half an inch wide at the base, and gradually tapering to the point ; deeply channelled, margins armed with very minute white spines somewhat recurved, palish green with white oval distinct spots, not very fleshy, and of a supple consistence. *Scape* nearly a foot long, semicylindrical at the lower part and rounded above, clothed with distinct, ovate, acuminate, streaked, scariose *Bractes,* half embracing the stem. *Flowers* in a terminal, subumbellate, lax raceme, at first erect, then nodding. *Peduncles* white, erect, longer than the *corolla,* which is cylindrical, an inch and a half long, with rose coloured petals tipped with green, a little recurved at the point : the three exterior ones somewhat the shortest. *Filaments* unequal : *Anthers* oval, orange coloured : *Style* the length of the corolla : *Stigma* capitate.

For

For this very rare species, which is supposed not to exist in any of our other collections except in that of Kew, where it was introduced about two years since from the Cape of Good Hope, we are indebted to THOMAS KITCHIN, Esq. of Norwich, in whose garden, rich in succulent plants, it flowered in July last.

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2228 Falkia, Creeping.
2253 Foxglove, Levant.
2194 ——— Wooly-leaved.
2250 Furcræa, Gigantic.
2212 Gastrolobium, Two-lobed.
2270 Gazania, Golden-flowered.
2195 Geodorum, Lemon-coloured.
2256 Globularia, Common; or Blue Daisy.
2192 Goat's-Rue, Oriental.
2246 Hakea, Shining-leaved.

Pl.

2263 Heath, Dark-flowered.
2266 ——— Gem-bearing.
2213 Hedysarum, Alpine.
2269 Lavatera, Mallow-like.
2226 ——— Three-Lobed.
2214 Lebeckia, Naked.
2223 Liparia, Concave-leaved.
2238 Lobelia, Kalm's.
2251 ——— Long-stalked.
2189 Magnolia, Large-leaved.
2218 Marigold, Large-flowered.
2237 Meadow-rue, Alpine.
2259 Meadow-Saxifrage, Gummy.
2268 Melaleuca, Decussate.
2235 Melastoma, Osbeckia-like.
2241 ——— Red-veined.
2203 Oncidium, Zig-zag.
2248 Onosma, Siberian simple.
2209 Palma-Christi; or Castor-Oil plant.
2264 Peony, Downy.
2244 Puschkinia, Squil-like.
2271 Rampion, Scorzonera-leaved.
2254 Rue, Large-flowered, flax-leaved.
2191 Rulingia, Cloth-leaved.
2207 Saxifrage, Fountain.
2198 Sheeps-bit, Perennial.
2193 Sida, Smooth Virginian.
2211 Snow-Berry.
2210 Speedwell, Orchis-flowered.
2258 Spurge, Broad-leaved.
2224 Stonecrop, Blue-flowered.
2234 Storks-bill, Diœcious black-flowered.
2249 Stylidium, Fine-leaved.
2221 Tobacco, Langsdorff's.
2202 Tooth-wort, Five-leaved.
2245 Vanda, Chequer-flowered.
2200 Vervain, Lambert's.
2206 Vetch, Saint-foin.
2219 Wall-cress, Nodding.
2239 Water-Iris, Pale-yellow.
2196 Wolfs-bane, Carpathian.
2215 Wood-sorrel, Violet-coloured.

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2196 Aconitum septentrionale, β. *carpaticum*.
2272 Aloe microcantha.
2227 Amaranthus speciosus.
2197 Anchusa italica.
2219 Arabis nutans.
2204 Arethusa bulbosa.
2220 Arum spirale.
2225 Aspalathus chenopoda.
2233 ——— ciliaris.
2218 Calendula chrysanthemifolia.
2257 Chaptalia tomentosa.
2190 Chloranthus monostachys.
2262 Cineraria aurantiaca.
2243 Claytonia sibirica.
2205 Convolvulus bicolor.
2231 Crinum declinatum.
2208 ——— defixum.
2217 ——— speciosum.
2240 Crocus vernus, γ. obovatus.
2232 Cryptostemma calendulacea α.
2201 Cuphea circæoides.
2242 Denbrobium cucullatum.
2202 Dentaria pentaphylla.
2253 Digitalis orientalis.
2194 ——— tomentosa.
2247 Dillwynia cinerascens.
2191 Dodartia orientalis.
2232 Dolichos sinensis.
2216 Drypis spinosa.
2266 Erica gemmifera.
2263 —— sanguinolenta.
2230 Eugenia myrtifolia.
2258 Euphorbia epithymoides.
2228 Falkia repens.
2250 Furcræa gigantea.
2192 Galega orientalis.
2212 Gastrolobium bilobum.
2270 Gazania uniflora
2195 Geodorum citrinum.
2256 Globularia vulgaris.
2246 Hakea nitida.
2213 Hedysarum alpinum.

Pl.

2198 Jasione perennis.
2239 Iris Pseudacorus, β. pallido-flava.
2269 Lavatera plebeia.
2226 ——— triloba.
2214 Lebeckia nuda.
2223 Liparia vestita.
2238 Lobelia Kalmii.
2251 ——— pedunculata.
2189 Magnolia macrophylla.
2268 Melaleuca decussata.
2235 Melastoma osbeckioides.
2241 ——— sanguinea.
2221 Nicotiana Langsdorffii.
2203 Oncidium flexuosum.
2248 Onosma simplicissima.
2261 Orobus niger.
2215 Oxalis violacea.
2264 Pæonia pubens.
2234 Pelargonium dioicum.
2244 Puschkinia scilloides.
2271 Phyteuma scorzonerifolia.
2267 Ranunculus cassubicus.
2229 ——— pedatus.
2209 Ricinus communis.
2191 Rulingia pannosa.
2254 Ruta linifolia, β. grandiflora.
2207 Saxifraga irrigua.
2224 Sedum cæruleum.
2259 Seseli gummiferum.
2193 Sida Napæa.
2255 Silene lacera.
2260 Spartium radiatum.
2265 Spartium virgatum.
2249 Stylidium tenuifolium.
2211 Symphoria racemosa.
2237 Thalictrum alpinum.
2245 Vanda Roxburghii.
2200 Verbena Lamberti.
2210 Veronica orchidea.
2206 Vicia onobrychioides.
2236 Yucca angustifolia.
2222 —— stricta.